

# STIC Search Report Biotech-Chem Library

# STIC Database Tracking Number 2007

TO: Terra Gibbs

Location: 2d10 / 2c18

Art Unit: 1635

Thursday, August 18, 2005

Case Serial Number: 10/667022

From: Noble Jarrell

**Location: Biotech-Chem Library** 

**Rem 1B71** 

Phone: 272-2556

Noble.jarrell@uspto.gov

Search Notes					
		•			
			· .		
	•				
			٠		



THIS PAGE BLANK USTO

Schreiber, David

162645

From:

Gibbs, Terra

Sent:

Thursday, August 04, 2005 10:37 AM

To:

Schreiber, David

Subject:

Sequence search request...

Hi David,

I have another request for a score over length search:

I need a length limited nucleotide sequence search of SEQ ID NO:4 in USSN 10/667022, where the returns are rank ordered based on the score over length/ratio as we've discussed. I need the lengths limited to hits between 8 and 80 nucleotides, and I'll take as many hits as you can import into excel (64,000?), and alignments for anything above .75 on the above ratio. Hope this is clear, please call me if it's not. I also need the interference databases searched.

David, is it possible to only return patent hits from ISIS?????

Terra Cotta Gibbs, Ph.D. Art Unit 1635 Remsen Building 2D10 Mailbox 2C18 571-272-0758

THIS PAGE BLANK USTON

### FOR OFFICIAL USE ONLY

ACCESS DB #	
PLEASE PRINT CLEARLY	

#### Scientific and Technical Information Center

## SEARCH REQUEST FORM

Requester's Full Name:		Examiner # :	Date:
Art Unit:	Phone Number: 2-	Serial Number:	
Location (Bldg/Room#):	(Mailbox #): ************	Results Format Preferred	(circle): PAPER
To ensure an efficient and qualit	ty search, please attach a copy of th	he cover sheet, claims, and abstract o	r fill out the following:
Title of Invention:			
Inventors (please provide full	I names):		
		•	
Earliest Priority Date:		-	
elected species or structures, keyw	ords, synonyms, acronyms, and reg	ns specifically as possible the subject n istry numbers, and combine with the c r relevant citations, authors, etc., if kn	concept or utility of the invention.
*For Sequence Searches Only* Pappropriate serial number.	Please include all pertinent informat	tion (parent, child, divisional, or issued	d patent numbers) along with the
		•	•
		•	
			•
		,	
•			
	•		•
·			
**************************************	*********	*******	*******
STAFF USE ONLY Searcher: No.L.	Type of Search  (5 NA Sequence	Vendors and cost	••
Searcher Phone #:		•	Dialog
Searcher Location:			www/Internet
Date Searcher Picked Up:		In-house sequ	
			Oligomer Score/Length
Date Completed: \$\\\ \( \( \( \( \( \( \) \) \)	<del></del>	Interference	SPDI Encode/Transl
Searcher Prep & Review Time: 16		•	. •-

THIS PAGE BLANK USPO

#### SCORE OVER LENGTH SEARCHES

Attached is a score over length search. This search was developed to overcome limitations in most standard search systems which favor large sequences with high scoring, but lesser overall identity over smaller sequences with higher overall identity. This search is especially useful for relatively small nucleic acid or polypeptide target sequences (antisense, fragments, probes, primers, RNAi, epitopes, haptens, etc.) claimed functionally via a form of hybridization and/or identity language and having defined upper and lower polynucleotide and or polypeptide length limits.

The score over length search is performed by first running the query sequence using examiner-specified identity and polynucleotide or protein length limit parameters, and saving 65,000 hits and 0 alignments from each desired database. The resulting output is reformatted using a Microsoft Word macro and is imported into Excel. The summary table data are then sorted by the ratio of score of each hit sequence divided by its length and the accession numbers for all hits below the examiner's desired score over length parameters are deleted. The remaining accession numbers are used to pull the corresponding sequences from the databases into subdatabases enriched for good hits and the query sequence is re-run against these subdatabases to yield the final results.

The score over length cutoff for this search is \*\*

Examiner Please Note: This cover sheet should be included when submitting results to be scanned.

THIS PAGE BLANK (USPTO)

24.6 0.5 31 1 A1153615 24.4 0.5 31 1 BM588370 22.8 0.4 26 1 CW020478 22.8 0.4 28 1 CV091538	38 21.4 0.4 28 1 CV665010 ACCESSION:CV665010 39 20 0.4 20 1 CF305590 ACCESSION:CV65010 40 19.4 0.4 23 1 CV664628 ACCESSION:CV664628 41 19.4 0.4 23 1 CV6646488 ACCESSION:CV664688	19.2 0.4 24 1 AZ308225 19.2 0.4 24 1 AZ814559 19.2 0.4 24 1 TAZSTRENED	18.8 0.4 24 1 AZ827015 18 0.4 19 1 CP306449 17.8 0.4 21 1 AZ597932	17 0.3 19 1 CE3403019 17 0.3 19 1 CO578459 16.4 0.3 18 1 AJ725584	16 0.3 16 1 AJ679356	16 0.3 16 1 CR/86853 16 0.3 17 1 BM298023	16 0.3 17 1 BM399768 16 0.3 20 1 CP307519	16 0.3 20 1 CF326591 ALIGNMENTS		S6 bp mRNA linear EST 24-7 Barley EST endosperm library Hordeum vulgare subsp.	vulgale conv clone bubb3414 5 sequence.		2	Commissi incream virgate subsp. Virgate Eukaryota; Viridiplantae; Streptophyta; Embryophyta; Tracheophyta; Spermatophyta; Magnoliophyta; Liliopsida; Poales; Poaceae; Pooideae; Triticeae; Hordeum.	<pre>1 (bases 1 to 56) Ali,S, Holloway,B. and Taylor,W.C.</pre>	TLE Normalisation of cereal endosperm EST libraries for structural and functional genomic analysis	Ā.	Division of Plant Industry. GPO Box 1600. Canberra, ACT 2601. Australia	Tel: 61 2 6246 5223 Fax: 61 2 6246 5000	Email: Bill Taylor@csiro.au Seq primer: M13 reverse primer	9		/culcivar="Himalaya" /sub_species="vulgare"	/db_xref="taxon:112509" /clone="BNEL34f4"	/tissue_type="endosperm" /dev stage="developing endosperm tissue 10, 12, 15 dpa	(ady post antiders) /lab host="Marking Technology" /lab lbt="mail" nem addesser	/cloum_ill="bailey sal endospeim illusiy" /note="Vector: _ziplox; Site_1: Sal 1; Site_2: Not I; mRNA was prepared from endosperm tissues of the barley cultivar
0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0		C 4 4 2 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4	Ω Ω Ω 44 44 5	4 4 Q I	C 52	W 42 n	50 00 00 00 00 00 00 00 00 00 00 00 00 0	<b>8</b> 0	-	RESULT CV0581 LOCUS DEFINI	ACCESSION	VERSION	SOURCE	CONO	REFERENCE AUTHORS	TITL	COMMENT				FEATURES	ā					
GenCore veraion 5.1.6 Copyright (c) 1993 - 2005 Compugen Ltd.	OM nucleic - nucleic search, using sw model Run on: August 18, 2005, 09:13:44 ; Search time 5 Seconds	(without alignments) 3.936 Million cell updates/sec	Title: US-10-667-022-4 Perfect score: 5085 Sequence: 1 ggatcccccgggctgcaggatcgagggggcccggtacc 5085	Scoring table: IDENTITY NUC Gapop 10.0 , Gapext 0.5	Searched: 58 segs, 1935 residues	Total number of hits satisfying chosen parameters: 116	Minimum DB seq length: 8 Maximum DB seq length: 80	Post-processing: Minimum Match 0% Maximum Match 100% Listing first 58 summaries	Database : fetch4rst.seq:*	Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.	SUMMARIES *	Result Query No. Score Match Length DB ID Description	44 4 0 9 5 6 1 CV058130	2 42 0.8 53 1 CV066817 3 41.4 0.8 45 1 CV066098 4 41.4 0.8 46 1 CV059173	41.4 0.8 48 1 CV064988 ACCESSION 41 0.8 54 1 CV057724 ACCESSION	41 0.8 54 1 CV307126 ACCESSION 40.4 0.8 46 1 CV061744 ACCESSION	39.8 0.8 46 1 CV063340 ACCESSION 39.6 0.8 51 1 CW509332 ACCESSION 39.4 0.8 41 1 CV062138 ACCESSION	12 38.4 0.8 42 1 CV062024 ACCESSION 13 36.6 0.7 47 1 CV060361 ACCESSION	14 36.6 0.7 47 1 CV060559 ACCESSION 15 35.6 0.7 44 1 CV060847 ACCESSION	35.6 0.7 47 1 CVO55836 ACCESSION 35.6 0.7 47 1 CVO61673 ACCESSION 34.6 0.7 47 1 CVO61673 ACCESSION ACCESSI	34.4 0.7 40 1 CW064759 ACCESSION 34.4 0.7 40 1 CW764759 ACCESSION 34.4 0.7 40 1 CW764759	33.6 0.7 42 1 CW509301 ACCESSION 33.4 0.7 40 1 CV064457 ACCESSION	32.8 0.6 41 1 CV054826 ACCESSION: 32.4 0.6 36 1 CV066718 ACCESSION:	31.4 0.6 35 1 CV066327 ACCESSION: 30.4 0.6 36 1 CV091545 ACCESSION:	0.4 0.6 37 1 CV055204 ACCESSION: 30 0.6 30 1 CW0520481 ACCESSION: 9 0 6 31 1 CW05443 ACCESSION:	29.4 0.6 31 1 CV057897	25 0.5 31 1 CV066570 ACCESSION: 24.8 0.5 31 1 CV066570 ACCESSION:

```
CV059173.1 GI:51522312
                                                                                                             CV066098.1 GI:51529275
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       0.8%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Local Similarity
nes 42; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            sequence.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CV059173
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      source
RESULT 3
CV066098
LOCUS
DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ORGANISM
                                                                                                                                                        SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ACCESSION
                                                                                                                                                                                                                                                                                                                                 JOURNAL
COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             VERSION
KEYWORDS
                                                                                                                                                                                                                                                                          AUTHORS
TITLE
                                                                                              ACCESSION
                                                                                                                 VERSION
KEYWORDS
                                                                                                                                                                                                                                                         REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               RESULT 4
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CV059173
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ઠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       /cultivat="natrog"
/db_xref="taxon:4565"
/clone="wWEL27a3"
/tissue_type="endosperm"
/tissue_type="endosperm"
/dev_atage="developing endosperm tissue 6, 8, 10 dpa (days post anthesis)"
/lab host="DH10B (life Technology)"
/lab host="DH10B (life Technology)"
/clone_lib="wheat EST endosperm library"
/note="vector: Zipbox; Site_1: Sal I; Site_2: Not I; mRNA
/note="vector: Zipbox; Site_1 from pooled 6, 8, and 10 dpa
Hartog. cDNA was synthesised from pooled 6, 8, and 10 dpa
endosperm using Not I-oligo(dT)18 primer/adapter (librarmacia Biotech), and then ligated to the Sal I-Not I
site_0 Zipbox vector (Life Technology) after adding a
Sal I-Xho I adapter: (Stratagene). Constructed by Shahjahan
Ali and Bill Taylor:"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ö
                                                                                                                                                                                                                                                                                                                                              wNEL27a3 Wheat EST endosperm library Triticum aestivum cDNA clone WNEL27a3 5' similar to Unknown Function, mRNA sequence. CV065817
        Himalaya. CDNA was synthesised from pooled 10, 12, and 15 dpa endosperm using Not I-oligo(dT)18 primer/adapter (Pharmacia Biotech), and then ligated to the Sal I-Not I site of ZipLox vector (Life Technology) after adding a Sal I-Xho I adapter (Stratagene). Constructed by Shahjahan Ali and Bill Taylor."
                                                                                                                                                                               ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Triticum aestivum (bread wheat)
Triticum aestivum
Eukaryota; Viridiplantae; Streptophyta; Embryophyta; Tracheophyta;
Spermatophyta; Magnoliophyta; Liliopsida; Poales; Poaceae;
Pooideae; Triticae; Triticae;
I (bases 1 to 53)
Ali,S, Holloway,B. and Taylor,W.C.
Normalisation of cereal endosperm EST libraries for structural and functional genomic analysis
Plant Mol. Biol. Rep. 18, 123-132 (2000)
Contact: Bill Taylor.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Commonderalth Scientific and Industrial Research Organisation Division of Plant Industry.

Division of Plant Industry.

CSIRO Plant Industry, GPO Box 1600, Camberra, ACT 2601, Australia Tels 61 2 6246 5223

Fax: 61 2 6246 5203

Fax: 61 2 6246 5000

Email: Bill Taylor@csiro.au
Seq primer: Mil reverse primer
High quality sequence stop: 53.

Location/Qualifiers
      from pooled 10, 12, and 15
                                                                                                                                                                                                                  Gaps
                                                                                                                                                                               0; Gaps
                                                                                                                                                                                                                                                   ;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   DB 1; Length 56;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Score 42; DB 1; Length 53; Pred. No. 4.1;
                                                                                                                                                                               Indels
                                                                                                                                                                                 8;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1. .53
/organism="Triticum aestivum"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Pred. No. 4.1;
0; Mismatches
                                                                                                                                            Score 44.4; DE
Pred. No. 3.1;
0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 /mol_type="mRNA"
/cultivar="Hartog"
                                                                                                                                                                                                                                                                                                                                                                                                                                             CV065817.1 GI:51528994
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            0.8%;
                                                                                                                                              Query Match 0.9%;
Best Local Similarity 85.7%;
Matches 48; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Best Local Similarity
Matches 45; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                               VERSION
KEYWORDS
SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                     DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     REFERENCE
AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                        ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               JOURNAL
                                                                                                                                                                                                                                                                                                                             RESULT 2
CV065817
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ò
                                                                                                                                                                                                                              ઠ
```

g

```
/tissue_rnsward
/dev_stage="endosperm"
/dev_stage="endosperm"
/dev_stage="endosperm"
/dev_stage="endosperm tissue 6, 8, 10 dpa (days post anthesis"
/lab_host="DH108 [Life Technology)"
/lab_host="DH108 [Life Technology)"
/clone lib="Wheat EST endosperm library"
/clone lib="Wheat EST endosperm Lissues of the wheat cultivar was prepared from endosperm tissues of the wheat cultivar Hartog. cDNA was synthesised from pooled 6, 8, and 10 dpa endosperm using Not I-oligo(dT)18 primer/adapter (Pharmacia Biotech), and then ligated to the Sal I-Not I (Pharmacia Biotech), and then ligated to the Sal I-Not I site of Ziplox vector (Life Technology) after adding a site of Ziplox vector (Extatagene). Constructed by Shahjahan Ali and Bill Taylor."
                                                                                                                                                                                                                                                                         Triticum asstivum

Bukaryota; Viridiplantae; Streptophyta; Embryophyta; Tracheophyta;

Sukaryota; Viridiplantae; Streptophyta; Embryophyta; Tracheophyta;

Spermatophyta; Magnoliophyta; Liliopsida; Poales; Poaceae;

Pooideae; Triticae; Triticum.

1 (bases 1 to 45)

Stalis, Holloway, B. and Taylor, W.C.

Normalisation of cereal endosperm EST libraries for structural and functional genomic analysis

Luctional genomic analysis

Luctional genomic analysis

Luctional genomic analysis

Contact: Bill Taylor

Commonwealth Scientific and Industrial Research Organisation

Commonwealth Scientific and Industry.

CSIRO Plant Industry.

CSIRO Plant Industry, GPO Box 1600, Canberra, ACT 2601, Australia

Tel: 61 2 6246 52030

Fax: 61 2 6246 52000

Fax: 61 2 6246 52000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CV059173 46 bp mRNA linear EST 24-AUG-2004 BNEL45b8 Barley EST endosperm library Hordeum vulgare subsp. vulgare cDNA clone BNEL45b8 5' similar to Unknown Function, mRNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Hordeum vulgare subsp. vulgare
Hordeum vulgare subsp. vulgare
Hordeum vulgare subsp. vulgare
Eukaryota; Viridiplantae; Streptophyta; Embryophyta; Tracheophyta;
Spermatophyta; Magnoliophyta; Liliopsida; Poales; Poaceae;
Pooideae; Triticeae; Hordeum.
1 (bases 1 to 46)
Ali,S, Holloway,B. and Taylor,W.C.
CV066098 45 bp mRNA linear EST 24-AUG-2004 WNEL2g3 Wheat EST endosperm library Triticum aestivum CDNA clone WNEL2g3 5' similar to Unknown Function, mRNA sequence.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Length 45;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               DB 1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1. .45
/organism="Triticum aestivum"
/mol_type="mRNA"
/cultivar="Hartog"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Score 41.4;
Pred. No. 4;
                                                                                                                                                                                                                                               Triticum aestivum (bread wheat)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Email: Bill.Taylor@csiro.au
Seg primer: Ml3 reverse primer
High quality sequence stop: 45.
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 /db_xref="taxon:4565"
/clone="WNEL2g3"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        REFERENCE
```

```
VERSION
KEYWORDS
SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Bource
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            RESULT 6
CV057724
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            /tissue_rype="endosperm"

/dev stage="developing endosperm tissue 10, 12, 15 dpa

/dav stage="developing endosperm tissue 10, 12, 15 dpa

/dav stage="developing endosperm library"

/clone lib="Barley EST endosperm library"

/clone lib="Barley EST endosperm library"

/note="Vector: ZipLox; Site 1: Sal I; Site 2: Not I; mRNA

was prepared from endosperm lissues of the barley cultivar

Himalaya. CDNA was synthesised from pooled 10, 12, and 15

dpa endosperm using Not I-oligo(dT)18 primer/adapter

(Pharmacia Blocech), and then ligated to the Sal I-Not I

site of ZipLox vector (Life Technology) after adding a

Sal I-Xho I adapter (Stratagene). Constructed by Shahjahan

Ali and Bill Taylor."
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Lovewroot WNELLT/h3 Wheat EST 24-AUG-2004
WNELLT/h3 Wheat EST endosperm library Triticum aestivum cDNA clone
WNELLT/h3 5' similar to Unknown Function, mRNA sequence.
CV064988
Normalisation of cereal endosperm EST libraries for structural and functional genomic analysis
functional genomic analysis
functional genomic Rep. 18, 123-132 (2000)
Context: Bill Taylor
Commonwealth Scientific and Industrial Research Organisation
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Triticum aestivum

Eukaryota; Viridiplantae; Streptophyta; Embryophyta; Tracheophyta;
Spermatophyta; Magnoliophyta; Liliopsida; Poales; Poaceae;
Pooideae; Triticeae; Triticum.

1 (bases 1 to 48)

Ali, S, Holloway, B. and Taylor, W.C.

Normalisation of cereal endosperm EST libraries for structural and functional genomic analysis
Plant Mol. Biol. Rep. 18, 123-132 (2000)

Contact: Bill Taylor

Contact: Bill Taylor
                                                                                                                       Division of Plant Industry.

CSIRO Plant Industry, GPO Box 1600, Canberra, ACT 2601, Australia
Tel: 61 2 6246 5223

Eax: 61 2 6246 5000

Email: Bill.Taylor@csiro.au
Seq primer: M3 reverse primer
High quality sequence stop: 46.

Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Division of Plant Industry.
CSIRO Plant Industry, GPO Box 1600, Canberra, ACT 2601, Australia
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Commonwealth Scientific and Industrial Research Organisation
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 0.8%; Score 41.4; DB 1; Length 46; 97.7%; Pred. No. 4.1;
                                                                                                                                                                                                                                                                                                                                                  /organism="Hordeum vulgare subsp. vulgare"
/mol_type="mRNA"
/cultivar="Himalaya"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              /organism="Triticum aestivum"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                       /sub_species="vulgare"
/db_xref="taxon:112509"
/clone="BNEL45b8"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Triticum aestivum (bread wheat)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Email: Bill.Taylor@csiro.au
Seg primer: M13 reverse primer
High quality sequence stop: 48.
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CV064988.1 GI:51528165
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Tel: 61 2 6246 5223
Fax: 61 2 6246 5000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Best Local Similarity 97.7
Matches 42; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         VERSION
KEYWORDS
SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Bource
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            REFERENCE
AUTHORS
TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          JOURNAL
                                                     JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          RESULT 5
CV064988
                                                                                                                                                                                                                                                                                                    FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 FEATURES
     TITLE
                                                                              COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ઠે
```

```
Hordeum vulgare subsp. vulgare
Hordeum vulgare subsp. vulgare
Eukaryota, Windiplantae, Streptophyta, Embryophyta, Tracheophyta;
Eukaryota, Viridiplantae, Streptophyta, Entropy, Viridiplantae, Streptophyta, Enterpopa, Viridiplantae, Europtophyta, Enterpopa, Enterpo
                                                                                                                                                                                                                                                                                               /lab host="DH10B (Life Technology)"
/clone_lib="Wheat EST endosperm library"
/clone_lib="Wheat EST endosperm library"
/note="Vector: ZipLox; Site_l: Sal I; Site_2: Not I; mRNA
was prepared from endosperm Lisaues of the "heat cultivar
Hartog: CNNA was synthesised from pooled 6, 8, and 10 dpa
endosperm using Not I-oligo(dT)18 primer/adapter
(Pharmacla Biotech), and then ligated to the Sal I-Not I
site of ZipLox vector (Life Technology) after adding a
Sal I-Xho I adapter (Stratagene). Constructed by Shahjahan
Ali and Bill Taylor."
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      /tissue_type="endosperm"
/dev_stage="developing endosperm tissue 10, 12, 15 dpa
/day stage="developing endosperm tissue 10, 12, 15 dpa
/days post anthesis"
/lab_host="bH10B (Life Technology)"
/clone lib="Barley EST endosperm library"
/note="Vector: ZipLox; Site_1: Sal I; Site_2: Not I; mRNA
was prepared from endosperm tissues of the Barley cultivar
Himalaya. cDNA was synthesised from pooled 10, 12, and 15
dpa endosperm using Not I-oligo(dT)18 primer/adapter
(Pharmacia Biotech), and then ligated to the Sal I-Not I
                                                                                                                                                                                                                  10 dpa (days
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          EST 24-AUG-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CVO57724

BNEL30a8 Barley EST endosperm library Hordeum vulgare subsp.
vulgare cDNA clone BNEL30a8 5' similar to Unknown Punction, mRNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Gape
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ..
0
                                                                                                                                                                                                                       8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Score 41.4; DB 1; Length 48; Pred. No. 4.2; 0; Mismatches 1; Indels
                                                                                                                                               /tissue_type="endosperm"
/dev_stage="developing endosperm tissue 6,
post_anthesis)"

    .54
/organism="Hordeum vulgare"

                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Tel: 61 2 6246 5223
Fax: 61 2 6246 5000
Email: Bill.Taylor@ceiro.au
Seq primer: M13 reverse primer
High quality sequence stop: 54.
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 /sub_species="vulgare"
/db_xref="taxon:112509"
/clone="BNEL30a8"
/cultivar="Hartog"
/db_xref="taxon:4565"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    /mol_type="mRNA"
/cultivar="Himalaya"
                                                                                                                /clone="WNEL17h3"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CV057724.1 GI:51520863
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                0.8%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Query Match 0.81
Best Local Similarity 97.77
Matches 42; Conservative
```

g 8

```
/tissue_type="endosperm"
/tissue_type="endosperm"
/dev stage="developing endosperm tissue 10, 12, 15 dpa
/dev stage="developing endosperm tissue 10, 12, 15 dpa
/days post anthesis)"
/lab_host="lulion (Life Technology)"
/lab_host="lulion (Life Technology)"
/clone lib="Barley ST endosperm library"
/clone lib="separed from endosperm lissues of the barley cultivar
was prepared from endosperm tissues of the barley cultivar
Himalaya. CDNA was synthesised from pooled 10, 12, and 15
dpa endosperm using Not I-oligo(dT)18 primer/adapter
fpharmacia Biotech), and then ligated to the Sal I-Not I
(Pharmacia Biotech), and then ligated to the Sal I-Not I
site of ZipLox vector (Life Technology) after adding a
Sal I-Xho I adapter (Stratagene). Constructed by Shahjahan
Ali and Bill Taylor."
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Hordeum vulgare subsp. vulgare
Hordeum vulgare subsp. vulgare
Hordeum vulgare subsp. vulgare
Bukaryota; Viridiplantae; Streptophyta; Embryophyta; Tracheophyta;
Spermatophyta; Magnoliophyta; Liliopsida; Poales; Poaceae;
Pooldeae; Triticeae; Hordeum.

(Dases 1 to 46)
Ali, S, Holloway, B. and Taylor, W.C.
Normalisation of cereal endosperm EST libraries for structural and functional genomic analysis
functional genomic analysis
Contact: Bill Taylor
Commonwealth Scientific and Industrial Research Organisation
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        EST 24-AUG-2004
Ali,S, Holloway,B. and Taylor,W.C.
Ali,S, Holloway,B. and Taylor,W.C.
Normalisation of cereal endosperm EST libraries for structural and functional genomic analysis
Plant Mol. Biol. Rep. 18, 123-132 (2000)
Contact: Bill Taylor
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Division of Plant Industry.
CSIRO Plant Industry, GPO Box 1600, Canberra, ACT 2601, Australia
                                                                                                                                         Commonwealth Scientific and Industrial Research Organisation
Division of Plant Industry.
CSIRO Plant Industry, GPO Box 1600, Canberra, ACT 2601, Australia
CSIRO Plant Industry, GPO Box 1600, Canberra, ACT 2601, Australia
Tel: 61 2 6246 5203
Fax: 61 2 6246 5000
Email: Bill.Taylor@csiro.au
Seq primer: Mi3 reverse primer
High quality sequence stop: 46.
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CV063340 HEST 24-AUG-20 BNEL89C2 Barley EST 24-AUG-20 BNEL89C2 Barley EST endosperm library Hordeum vulgare subsp. vulgare cDNA clone BNEL89C2 5' similar to Unknown Function, mRNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Score 40.4; DB 1; Length 46;

    .46
    Corganism="Hordeum vulgare subsp. vulgare"
/mol type="mRNA"
/culTivar="Himalaya"

                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Query Match
0.8%; Score 40.4; D
Best Local Similarity 97.6%; Pred. No. 4.7;
Matches 41; Conservative 0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         /sub_species="vulgare"
/db_xref="taxon:112509"
/clone="BNEL71d8"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Tel: 61 2 6246 5223

Fax: 61 2 6246 5000

Email: Bill.Taylor@csiro.au

Eqq primer: M13 reverse primer

High quality sequence stop: 46.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CV063340
CV063340.1 GI:51526479
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          VERSION
KEYWORDS
SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                           source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AUTHORS
TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   REFERENCE
                                       AUTHORS
TITLE
                                                                                                               JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      RESULT 9
CV063340
                  RFERENCE
                                                                                                                                                                                                                                                                                                                                                                 FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ద
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       mouse
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       EST 24-AUG-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Hordeum vulgare subsp. vulgare
Hordeum vulgare subsp. vulgare
Subaryora, Viridiplantae; Streptophyta; Embryophyta; Tracheophyta;
Spermatophyta; Magnoliophyta; Liliopsida; Poales; Poaceae;
Pooideae; Triticeae; Hordeum.
                                                                                                                                                                                                                                                                                                                                                                                              CV307126 54 bp mRNA linear EST 23-SEP-2004 tj41a12.b7 Mouse 5' RACE clones Mus musculus cDNA 5', mRNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Bukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus. 1 (bases 1 to 54)
Dike,S., Balija,V.S., Nascimento,L.U., Xuan,Z., Ou,J., Zutavern,T., Palmer,L.E., Hannon,G., Zhang,M.Q. and McCombie,W.R.
The Mouse Genome: Experimental examination of gene predictions and transcriptional start sites
                                                                                                                                                                      0
                  site of _ZipLox vector (Life Technology) after adding a Sal I-Xho I adapter (Stratagene). Constructed by Shahjahan Ali and Bill Taylor."
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CV061744 1inear EST 24-AUG-20
BNEL71d8 Barley EST endosperm library Hordeum vulgare subsp.
vulgare cDNA clone BNEL71d8 5' similar to Unknown Function, mRNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             /_organism="Mus musculus"
/mol_type="mRNA"
/do xref="texno:10090"
/clone_lib="Woctor: pCR-TOPO2.1; Cloned 5' RACE fragments
/mote="Vector: pCR-TOPO2.1; Cloned 5' RACE fragments
amplified from 5' RACE cDNA generated from 15 pooled rissues and stages: 7, 11, 15, & 17-day total embryo,
whole brain, eye, kidney, liver, lung, prostate,
submaxilary gland, smooth muscle, spleen, testes and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Gaps
                                                                                                                                                                           Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ;
                                                                                                                                                                                                                       ;
0
                                                                                                                                                                                                                                                                         49
                                                                                                                                                                                                                                                    Query Match 0.8%; Score 41; DB 1; Length 54; Best Local Similarity 100.0%; Pred. No. 4.7; Matches 41; Conservative 0; Mismatches 0; Indels
                                                                                                                          DB 1; Length 54;
                                                                                                                                                                           Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   McCombie Laboratory
Cold Spring Harbor Laboratory
500 Sunnyside Blvd, Woodbury, NY 11797, USA
                                                                                                                                                                           ņ,
                                                                                                                            ; Score 41; DB 1
; Pred. No. 4.7;
0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Email: balija@cshl.org.
Location/Qualifiers
1. .54
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Mus musculus (house mouse)
Mus musculus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       GI:51524883
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CV307126.1 GI:52624459
                                                                                                                            Query Match 0.8%;
Best Local Similarity 89.8%;
Matches 44; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Unpublished (2004)
Contact: Balija VS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       516 422 4109
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CV061744
CV061744.1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                sequence.
                                                                                                                                                                                                                                                                                                                                                                                                                                                               seguence.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            VERSION
KEYWORDS
SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           VERSION
KEYWORDS
SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                  DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        RESULT 8
CV061744
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           FEATURES
                                                                                                                                                                                                                                                                                                                                                            RESULT 7
                                                                                                                                                                                                                                                                                                                                                                                 CV307126
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TITLE
```

ઠે 셤

source

FEATURES

```
/tissue type="endosperm"
/dev stage="developing endosperm tissue 10, 12, 15 dpa
/dev stage="developing endosperm tissue 10, 12, 15 dpa
/day post annhasis)"
/lab host="DH108 (life Technology)"
/clone_lib="Barley EST endosperm library"
/clone_lib="Barley EST endosperm lissue 2: Not 1; mRNA
was prepared from endosperm fissues of the Darley cultivar
Himalaya. CDNA was synthesised from pooled 10, 12, and 15
dpa endosperm using Not I-oligo(dT)18 primer/adapter
(Pharmacia Blotech), and then ligated to the Sal I-Not I
stre of ZipLox vector (Life Technology) after adding a
Sal I-XhO I adapter (Stratagene). Constructed by Shahjahan
Ali and Bill Taylor."
                                                                                                                            EST 24-AUG-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              EST 24-AUG-2004
                                                                                                                                                                                                                                                                                       Hordeum vulgare subsp. vulgare
Bukaryota, Viridiplantae, Streptophyta, Embryophyta, Tracheophyta,
Spermatophyta, Magnollophyta, Liliopsida, Poales, Poaceae,
Pooldeae, Triticee, Hordeum.
1 (Bases I to 43)
Ali,S, Holloway,B. and Taylor,W.C.
Ali,S, Holloway,B. and Taylor,W.C.
Pormalisation of cereal endosperm EST libraries for structural and
functional genomic analysis
Plant Mol. Biol. Rep. 18, 123-132 (2000)
Contact: Bill Taylor
Contact: Bill Taylor
Contact: Bill Taylor
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Division of Plant Industry.

CSIRO Plant Industry, GPO Box 1600, Canberra, ACT 2601, Australia Faz: 61 2 6246 5223

Fax: 61 2 6246 5000

Email: Bill.Taylor@csiro.au
Seq primer: Mil reverse primer
High quality sequence stop: 43.

Location/Qualifiers
                                                                                                                          CV062138
BNEL76g12 Barley EST endosperm library Hordeum vulgare subsp.
vulgare cDNA clone BNEL76g12 5' similar to Unknown Function, mRNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CV062024
BNEL75e2 Barley EST endosperm library Hordeum vulgare subsp.
vulgare cDNA clone BNEL75e2 5' similar to Unknown Function, mRNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            .
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Query Match 0.8%; Score 39.4; DB 1; Length 43; Best Local Similarity 97.6%; Pred. No. 5.1; Matches 40; Conservative 0; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1 43
/organism="Hordeum vulgare subsp. vulgare"
  /sub_species="vulgare"
/db_xref="taxon:112509"
/clone="BNEL76g12"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        EST.
Hordeum vulgare subsp. vulgare
                                                                                                                                                                                                                                                                        Hordeum vulgare subsp. vulgare
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                /mol_type="mRNA"
/cultivar="Himalaya"
                                                                                                                                                                                                            CV062138
CV062138.1 GI:51525277
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     GI:51525163
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CV062024
CV062024.1
                                                                                                                                                                                             seguence.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              sequence.
                                                                                                                                                                                                                           VERSION
KEYWORDS
SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                LOCUS
DEFINITION
                                                                                                                                             DEFINITION
                                                                                   RESULT 11
CV062138
                                                                                                                                                                                                                                                                                                                                                                        REFERENCE
AUTHORS
TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                            JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ACCESSION
VERSION
KEYWORDS
SOURCE
                                                                                                                                                                                                              ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     RESULT 12
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CV062024
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         셤
                                                       ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         information available from
http://baygenomics.ucsf.edu/cgi-bin/BaySearch.py?OPTION=EXACT&TYPE=
CELL LINE&KEY=BGA334
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ô
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Eukaryota: Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus. 1 (bases 1 to 51)
BayGenomics.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 http://baygenomics.ucsf.edu/
Unpublished (2001)
Contact: BayGenomics
Bay Area Functional Genomics Consortium (BayGenomics)
Email: info@baygenomics.ucsf.edu
Sequence tag generated by 5' RACE of total RNA from gene trap ES
cell line. ES cell lines harboring insertion mutation of target
gene are available upon request from BayGenomics. Annotation
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                51 bp mRNA linear GSS 06-OCT-: BGA334 BayGenomics Gene Trap Library pGT1Lxf Mus musculus cDNA, CW509332
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      /cell_type="Embryonic stem cell"
/clone_lib="BayGenomics Gene Trap Library pGT1Lxf"
/note="Vector: pGT1Lxf"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ..
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        0.8%; Score 39.6; DB 1; Length 51;
11.3%; Pred. No. 5.5;
.ve 0; Mismatches 4; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                            DB 1; Length 46;
                                        'organism="Hordeum vulgare subsp. vulgare"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  2 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAATTC 44
                                                                                                                                                                                                                                                                                                                                                                                                                                                        ; Score 39.8; DB
; Pred. No. 5.1;
0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1. .51
/organism="Mus musculus"
/mol type="mRNA"
/strain="129 ola"
/db xref="taxon:10090"
/sex="Male"
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Mus musculus (house mouse)
Mus musculus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CWS09332.1 GI:53838837
                                                                                                                                                                                                                                                                                                                                                                                                                                                            0.8%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ilarity 91.3%;
Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                    Query Match
Best Local Similarity 95.3'
Matches 41, Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Class: Gene Trap
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Query Match
Best Local Similarity
Matches 42; Conserva
```

VERSION KEYWORDS SOURCE ORGANISM

REFERENCE AUTHORS TITLE JOURNAL COMMENT

LOCUS DEFINITION CW509332/c

δ 요 ACCESSION

ò

Bource

FEATURES

```
/tissue_type="endosperm"
/dev_stage="endosperm"
/dev_stage="endosperm"
/dev_stage="endosperm"
/dev_stage="endosperm tissue 10, 12, 15 dpa
/dev_stage="endosperm tissue 10, 12, 15 dpa
/dosper="barley Est endosperm library"
/clone lib="barley Est endosperm library"
/clone lib="barley Est endosperm library"
/clone lib="propared from endosperm tissues of the barley cultivar
was propared from endosperm tissues of the barley cultivar
Himalaya. CDNA was synthesised from pooled 10, 12, and 15
dpa endosperm using Not I-oligo(dT)18 primer/adapter
(pharmacia Biotech), and then ligated to the Sal I-Not I
site of ZipLox vector (Life Technology) after adding a
sal I-Xho I adapter (Stratagene). Constructed by Shahjahan
Ali and Bill Taylor."
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  EST 24-AUG-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1 (bases 1 to 47)
Ali,S, Holloway,B. and Taylor,W.C.
Normalisation of cereal endosperm EST libraries for structural and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Hordeum vulgare subsp. vulgare
Eukaryota; Viridiplantae; Streptophyta; Embryophyta; Tracheophyta;
Spermatophyta; Magnoliophyta; Liliopsida; Poales; Poaceae;
Pooideae; Triticeae; Hordeum.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 functional genomic analysis
Plant Mol. Biol. Rep. 18, 123-132 (2000)
Contact: Bill Taylor
Commonwealth Scientific and Industrial Research Organisation
Division of Plant Industry,
CSIRO Plant Industry, GPO Box 1600, Canberra, ACT 2601, Australia
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    BNEL59e10 Barley EST endosperm library Hordeum vulgare subsp. vulgare cDNA clone BNEL59e10 5' similar to Unknown Function, mRNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     /tissue_type="endosperm"
/dev stage="developing endosperm tissue 10, 12, 15 dpa
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           DB 1; Length 47;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           /organism="Hordeum vulgare"
                                                                                                                                               /organism="Hordeum vulgare subsp. vulgare"
/mol_type="mRNA"
/cultivar="Himalaya"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               4; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                46 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAATTCCTGCGG 4
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    mRNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Score 36.6; DB pred. No. 7.8; 0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         /sub_species="vulgare"
/db_xref="taxon:112509"
/clone="BNEL59e10"
                                                                                                                                                                                                                                     /sub_species="vulgare"
/db_xref="taxon:112509"
/clone="BNEL57c6"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  47 bp
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       High quality sequence stop: 47.
Fax: 61 2 6246 buvu
Email: Bill.Taylor@csiro.au
Seq primer: M13 reverse primer
High quality sequence stop: 47.
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Tel: 61 2 6246 5223
Fax: 61 2 6246 5000
Famil: Bill.Taylor@csiro.au
Seg primer: M13 reverse primer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Hordeum vulgare subsp. vulgare
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      /mol_type="mRNA"
/cultivar="Himalaya"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CV060559.1 GI:51523698
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                0.7%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Query Match 0.73
Best Local Similarity 90.73
Matches 39; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        sednence.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              source
                                                                                                                                            Source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      RESULT 14
CV060559/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AUTHORS
TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   VERSION
KEYWORDS
SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  FEATURES
                                                                                                                 FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           엄
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       /mol type="mrRNA"
/cultivar="Himalaya"
/sub_species="vulgare"
/db xref="taxon:112509"
/dlone="BNEL75e2"
/tissue_type="addosperm"
/dev stage="developing endosperm tissue 10, 12, 15 dpa
/days post anthesis)"
/lab host="blub (Life Technology)"
/lab host="blub (Life Technology)"
/lab host="blub" Barley EST endosperm library"
/clone lib="Barley EST endosperm library"
/clone lib="Barley for endosperm tissues of the barley cultivar
was prepared from endosperm tissues of the barley cultivar
Himalaya. CDNA was synthesised from pooled 10, 12, and 15
dpa endosperm using Not I-oligo(dT)18 primer/adapter
(Pharmacia Biotech), and then ligated to the Sal I-Not I
site of Ziplox vector (Life Technology) after adding a
Sal I-xho I adapter (Stratagene). Constructed by Shahjahan
Ali and Bill Taylor."
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CV060361

BNEL57C6 Barley EST endosperm library Hordeum vulgare subsp.
vulgare cDNA clone BNEL57C6 5' similar to Unknown Function, mRNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ô
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Hordeum vulgare subsp. vulgare
Hordeum vulgare subsp. vulgare
Eukaryota; Viridiplantae; Streptophyta; Embryophyta; Tracheophyta;
Spermatophyta; Magnoliophyta; Liliopsida; Poales; Poaceae;
Pooideae; Triticeae; Hordeum.
1 (bases 1 to 47)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Ali,S, Holloway,B. and Taylor,W.C. Mormalisation of cereal endosperm EST libraries for structural and functional genomic analysis Plant Mol. Biol. Rep. 18, 123-132 (2000)
             Hordeum vulgare subsp. vulgare
Eukaryota; Viridiplantae; Streptophyta; Embryophyta; Tracheophyta;
Spermatophyta; Magnoliophyta; Liliopsida; Poales; Poaceae;
Pooideae; Triticeae; Hordeum.
1 (bases 1 to 42)
Ali,S, Holloway,B. and Taylor,W.C.
Normalisation of cereal endosperm EST libraries for structural and functional genomic analysis
Plant Mol. Biol. Rep. 18, 123-132 (2000)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Commonwealth Scientific and Industrial Research Organisation Division of Plant Industry.
CSIRO Plant Industry, GPO Box 1600, Canberra, ACT 2601, Australia Tel: 61 2 6246 5223
                                                                                                                                                                                                                                                                                                      Division of Plant Industry.
CSIRO Plant Industry, GPO Box 1600, Canberra, ACT 2601, Australia
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Gaps
                                                                                                                                                                                                                                                   Contact: Bill Taylor
Commonwealth Scientific and Industrial Research Organisation
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ó
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Score 38.4; DB 1; Length 42; Pred. No. 5.8; 0; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1. .42
/organism="Hordeum vulgare subsp. vulgare"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Tel: 61 2 6246 5223
Fax: 61 2 6246 5203
Email: Bill.Taylor@csiro.au
Seq primer: M13 reverse primer
High quality sequence stop:
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CV060361.1 GI:51523500
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             0.8%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Contact: Bill Taylor
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Query Match
Best Local Similarity
Matches 39; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  sednence.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CV060361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   VERSION
KEYWORDS
SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 RESULT 13
CV060361/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               JOURNAL
COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AUTHORS
TITLE
                        ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             REFERENCE
                                                                                                                                                                                                                                JOURNAL
                                                                                                                         REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         FEATURES
                                                                                                                                                                             TITLE
                                                                                                                                                                                                                                                        COMMENT
```

ઠે g

Gaps

ð 용

```
/tissue_type="endosperm"
/dev_stage="developing endosperm tissue 10, 12, 15 dpa
/dev_stage="developing endosperm tissue 10, 12, 15 dpa
/dev_stage="developing endosperm tissue 10, 12, 15 dpa
/done_lib=Barley Est endosperm library"
/clone_lib=Barley Est endosperm library"
/note="Vector: ZipLox; Site_1: Sal 1; Site_2: Not I; mRNA
was prepared from endosperm tissues of the Barley cultivar
Himalaya. CDNA was synthesised from pooled 10, 12, and
figa endosperm using Not I-oligo(dT)18 primer/adapter
(Pharmacia Biotech), and then ligated to the Sal I-Not I
site of ZipLox vector (Life Technology) after adding a
Sal I-Xho I adapter (Stratagene). Constructed by Shahjahan
Ali and Bill Taylor."
                                                                                                                                                                                                                                                                                                                                                                                                                       Hordeum vulgare subsp. vulgare

Bukaryora, Viridiplantes; Streptophyta; Embryophyta; Tracheophyta;

Bukaryora; Viridiplantes; Streptophyta; Embryophyta; Tracheophyta;

Spermatophyta; Magnollophyta; Liliopsida; Poales; Poaceae;

Pooideae; Triticeee; Hordeum

E 1 (bases 1 to 47)

Is Ali,S, Holloway, B. and Taylor, W.C.

Normalisation of cereal endosperm EST libraries for structural and functional genomic analysis

L Plant Mol. Biol. Rep. 18, 123-132 (2000)

Contact: Bill Taylor

Commonwealth Scientific and Industrial Research Organisation

Commonwealth Scientific and Industrial Research Organisation

Commonwealth Scientific and Industry.

CSIRO Plant Industry.

CSIRO Plant Industry, GPO Box 1600, Canberra, ACT 2601, Australia

Tel: 61 2 6246 5203

Email: Bill.Taylor@csiro.au

Seq primer: Mil reverse primer

High quality sequence stop: 47.

Location/Qualifiers
                                                                                                                                                                                                                                          CV055836 47 bp mRNA linear EST 24-AUG-2004 BNEL124a12 Barley EST endosperm library Hordeum vulgare subsp. vulgare cDNA clone BNEL124a12 5' similar to Unknown Function, mRNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   EST 24-AUG-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CV061673

BNEL70f11 Barley EST endosperm library Hordeum vulgare subsp.
vulgare cDNA clone BNEL70f11 5' similar to Unknown Function, mRNA
        Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Gарв
        ô
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       DB 1; Length 47;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              /organism="Hordeum vulgare subsp. vulgare"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         4; Indels
        4; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          46 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAATTCCTGCG 5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    0.7%; Score 35.6; DE
llarity 90.5%; Pred. No. 8.9;
Conservative 0; Mismatches
        0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           /sub_species="vulgare"
/db_xref="taxon:112509"
/clone="BNEL124a12"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          /mol_type="mRNA"
/cultivar="Himalaya"
                                                                                                                                                                                                                                                                                                                                                        CV055836
CV055836.1 GI:51518975
        38; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      . .47
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Query Match
Best Local Similarity
Matches 38; Conserva
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                sequence.
CV061673
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CV061673/c
LOCUS
DEFINITION
                                                                                                                                                                                           RESULT 16
CV055836/c
                                                                                                                                                                                                                                            LOCUS
DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                SOURCE
                                                                                                                                                                                                                                                                                                                                                  ACCESSION
VERSION
KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 REFERENCE
AUTHORS
           Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               RESULT 17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        COMMENT
                                                            ઠ
                                                                                                           셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               / sub_ species="vulgate"

/ sub_ species="vulgate"

/ db_ xref="taxon:112509"

/ clone="BNELGIN4"

/ tlssue_type="endosperm"

/ dev_stage="developing endosperm tissue 10, 12, 15 dpa

/ dav_stage="developing endosperm tissue 10, 12, 15 dpa

/ dav_stage="developing endosperm tissue 10, 12, 15 dpa

/ dav_stage="developing endosperm library"

/ lab_host="BH10B (Life Technology)"

/ clone="the Barley ST endosperm library"

/ clone="the Barley ST endosperm lissues of the Barley cultivar

/ note="Vector: ZipLox; Site 1: Sal I; Site 2: Not I; mRNA

was prepared from endosperm lissues of the Barley cultivar

/ Himalaya. CDNA was synthesised from pooled 10, 12, and 15

dpa endosperm using Not I-oligo(dT)18 primer/adapter

(Pharmacia Biotech), and then ligated to the Sal I-Not I

site of ZipLox vector (Life Technology) after adding a

Sal I-XhO I adapter (Stratagene). Constructed by Shahjahan

Ali and Bill Taylor:"
(days post anthesis)"

[Jab host="DH108 [Life Technology)"

[Clone="lob="Barley EST endosperm library"

[Note="Vector: ZipLox; Site_1: Sal 1; Site_2: Not 1; mRNA

[Note="Vector: ZipLox; Site_1: Sal 1; Site_2: Not I; mRNA

was prepared from endosperm tissues of the barley cultivar

Himalaya. CDNA was synthesised from pooled 10, 12, and 15

dips endosperm using Not I-oligo(dT)18 primer/adapter

[Pharmacia Biotech), and then ligated to the Sal 1.Not I

Sal 1-Xho I adapter (Stratagene). Constructed by Shahjahan

Ali and Bill Taylor."
                                                                                                                                                                                                                                                                                                                                                                                 ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        EST 24-AUG-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Hordeum vulgare subsp. vulgare
Hordeum vulgare subsp. vulgare
Bukaryota, Virighlantaes Streptophyta; Embryophyta; Tracheophyta;
Spermatophyta; Virighlantaes
Pooldeae; Triticeae; Hordeum.
I (basea: Triticeae; Hordeum.
I (basea: Lo 44)
Ali,S, Holloway,B. and Taylor,W.C.
Normalisation of cereal endosperm EST libraries for structural and functional genomic analysis
Functional genomic analysis
Contact: Bill Taylor
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Division of Plant Industry.
CSIRO Plant Industry, GPO Box 1600, Canberra, ACT 2601, Australia
Tell 61 2 6246 5000
Fax: 61 2 6246 5000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CV060847

BNEL61h4 Barley EST endosperm library Hordeum vulgare subsp.
vulgare cDNA clone BNEL61h4 5' similar to Unknown Function, mRNA
                                                                                                                                                                                                                                                                                                                                                                                 Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Commonwealth Scientific and Industrial Research Organisation
                                                                                                                                                                                                                                                                                                                                                                                 ;
0
                                                                                                                                                                                                                                                                                                                          Score 36.6; DB 1; Length 47; Pred. No. 7.8;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   DB 1; Length 44;

    44
        /organism="Hordeum vulgare subsp. vulgare"
        /mol type="mRNA"
        /culTivar="Himalaya"

                                                                                                                                                                                                                                                                                                                                                                                                                                  4; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Score 35.6; DI
Pred. No. 8.6;
                                                                                                                                                                                                                                                                                                                                                                           0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Email: Bill Taylor@csiro.au
Seg primer: M13 reverse primer
High quality sequence stop: 44.
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CV060847.1 GI:51523986
                                                                                                                                                                                                                                                                                                                       0.7%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                0.7%;
                                                                                                                                                                                                                                                                                                                                                                                 Conservative
                                                                                                                                                                                                                                                                                                                                                  Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CV060847
                                                                                                                                                                                                                                                                                                                                                                              39;
                                                                                                                                                                                                                                                                                                                            Query Match
                                                                                                                                                                                                                                                                                                                                                        Best Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       VERSION
KEYWORDS
SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           DEFINITION
                                                                                                                                                                                                                                                                                                                                                                           Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          REFERENCE
AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 RESULT 15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CV060847
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TITLE
```

```
/tissue_type="endosperm"
/tissue_type="endosperm"
/dev stage="endosperm"
/dev stage="endosperm"
/lab_host="BH108 [Life Technology)"
/lab_host="BH108 [Life Technology)"
/clone lib="Wheat EST endosperm library"
/clone lib="Wector: ZipLox; Site_1: Sal I; Site_2: Not I; mRNA
/note="Vector: ZipLox; Site_1: Sal I; Site_2: Not I; mRNA
/note="Vector: ZipLox; Site_1: Sal I; Site_2: Not I; mRNA
/note="Vector: ZipLox; Site_1: Sal I; Site_2: Not I; mRNA
/note="Vector: ZipLox; Site_1: Sal I; Site_2: Not I
/note="Vector: ZipLox vector (Life Technology) after adding a
site of ZipLox vector (Life Technology) after adding a
Sal I-Xho I adapper (Stratagene). Constructed by Shahjahan
Ali and Bill Taylor."
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  dpa (days
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CV064759 38 bp mRNA linear EST 24-AUG-2004 WNEL1498 Wheat EST endosperm library Triticum aestivum cDNA clone WNEL1498 5' similar to Unknown Function, mRNA sequence. CV064759
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Triticum accirum.

Eukaryota, Viridiplantae; Streptophyta; Embryophyta; Tracheophyta; Eukaryota, Viridiplantae; Streptophyta; Doales; Poaceae; Spermatophyta; Magnoliophyta; Liliopsida; Poales; Poaceae; Dooideae; Triticae; Triticum.

1 (bases I to 38)
Ali,S. Holloway,B. and Taylor,W.C.
Normalisation of cereal endosperm EST libraries for structural and functional genomic analysis.

Plant Mol. Biol. Rep. 18, 123-132 (2000)
Contact: Bill Taylor
Commonwealth Scientific and Industrial Research Organisation
Division of Plant Industry.

CSIRO Plant Industry, GPO Box 1600, Canberra, ACT 2601, Australia
GPO Box 1600, Canberra, ACT 2601, Australia
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           /clone="WNEL14g8"
/tissue type="endosperm"
/dev_stage="developing endosperm tissue 6, 8, 10
post anthesis)"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Length 43;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     DB 1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               . .38
'organism="Triticum aestivum"
                                                                                                                                                                                                               organism="Triticum aestivum"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Score 34.8; DB
Pred. No. 9.4;
0; Mismatches
                                   Tel: 61 2 6246 5223
Fax: 61 2 6246 5000
Email: Bill.Taylor@ceiro.au
Seq primer: M13 reverse primer
High quality sequence stop:
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Tel: 61 2 6246 5223
Fax: 61 2 6246 5000
Email: Bill.Taylor@csiro.au
Seg primer: M13 reverse primer
High quality sequence stop: 38.
Location/Qualifiers
                                                                                                                                                                                                                                       /mol type="mRNA"
/cultivar="Hartog"
/db xref="taxon:4565"
/clone="WNEL30e11"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Triticum aestivum (bread wheat)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           /mol_type="mRNA"
/cultivar="Hartog"
/db_xref="taxon:4565"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               GI:51527936
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    0.7%;
             CSIRO Plant Industry,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            36, Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CV064759.1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          VERSION
KEYWORDS
SOURCE
ORGANISM
                                                                                                                                                                                                         source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               RESULT 19
CV064759
LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       REFERENCE
AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         COMMENT
                                                                                                                                                                           FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    / cutt.rat. n.midaty...
/ cutt.rat. n.midaty...
/ sub_species="vulgare"
/ db_xref="taxon:112509"
/ clone="nNELTOff11"
/ tissue_type="endosperm"
/ days post anthesis)"
/ lab host="lall108 (Life Technology)"
/ clone lih="barley EST endosperm library"
/ clone lih="marley EST endosperm lissues of the Darley cultivar was prepared from endosperm lissues of the Darley cultivar Himalaya. CDNA was synthesised from pooled 10, 12, and 15 dpa endosperm using Not I-oligo(dT)18 primer/adapter dpa endosperm using Not I-oligo(dT)18 primer/adapter site of _ ZipLox vector (Life Technology) after adding a site of _ ZipLox vector (Stratagene). Constructed by Shahjahan Ali and Bill Taylor."
                                                                                                        Entraction of grant in the control of cereal endosperm EST libraries for structural and solication of cereal endosperm EST libraries for structural and functional genomic analysis

In the control of cereal endosperm EST libraries for structural and control of cereal endosperm EST libraries for structural and control of endomic analysis

In the control of cereal endosperm EST libraries for structural and control of Endomic analysis

In the cereal endosperm EST libraries for structural and control of Endomic analysis

Control Endomic analysis

In the control ED in the cereal endosperm EST libraries and Endostry, GPO Box 1600, Canberra, ACT 2601, Australia Tel: 61 2645 5200

Email: Bill.Taylor@ceiro.au

Seq primer: Mil reverse primer

High quality sequence stop: 47.

Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CV066153 Hheat EST endosperm library Triticum aestivum cDNA clone WNEL30e11 Wheat EST endosperm library Triticum aestivum cDNA clone WNEL30e11 5' similar to Unknown Function, mRNA sequence.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Ali, S. Holloway, B. and Taylor, W.C.
Normalisation of cereal endosperm EST libraries for structural and functional genomic analysis
Flant Mol. Biol. Rep. 18, 123-132 (2000)
Contact: Bill Taylor
Commonwealth Scientific and Industrial Research Organisation
Division of Plant Industry.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Bukaryota; Viridiplantae; Streptophyta; Embryophyta; Tracheophyta;
Spermatophyta; Magnoliophyta; Liliopsida; Poales; Poaceae;
Pooideae; Triticeae; Triticum.
1 (bases 1 to 43)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ..
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           DB 1; Length 47;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               organism="Hordeum vulgare subsp. vulgare"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              5; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Score 35.6; DE
Pred. No. 8.9;
0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Triticum aestivum (bread wheat)
Triticum aestivum
                                                                                     Hordeum vulgare subsp. vulgare
Hordeum vulgare subsp. vulgare
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                /mol_type="mRNA"
/cultivar="Himalaya"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CV066153.1 GI:51529330
                                 CV061673.1 GI:51524812
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                0.7%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Query Match 0.73
Best Local Similarity 88.43
Matches 38; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ACCESSION
VERSION
KEYWORDS
SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           RESULT 18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         JOURNAL
                                                                                                                   ORGANISM
                                                                                                                                                                                                                                                  AUTHORS
TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CV066153
                                                                                                                                                                                                                                                                                                                                JOURNAL
                                                                                                                                                                                                                          REFERENCE
                                      VERSION
KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     COMMENT
                                                                                                                                                                                                                                                                                                                                                           COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 δ
```

```
Triticum aestivum
Enkaryota; Viridiplantae; Streptophyta; Embryophyta; Tracheophyta;
Espermatophyta; Magnoliophyta; Liliopsida; Poales; Poaceae;
Spermatophyta; Magnoliophyta; Liliopsida; Poales; Poaceae;
Pooideae; Triticeae; Triticum
TS All,S, Holloway,B. and Taylor,W.C.
Normalisation of cereal endosperm EST libraries for structural and functional genomic analysis
AL Plant Wol. Blol. Rep. 18, 123-132 (2000)
Contact: Bill Taylor
Commonwealth Scientific and Industrial Research Organisation
Division of Plant Industry, GPO Box 1600, Canberra, ACT 2601, Australia
                                                                                                                                                                                                                                        http://baygenomics.ucsf.edu/
Unpublished (2001)
Contact: BayGenomics Consortium (BayGenomics)
Email: info@baygenomics.ucsf.edu
Bay Area Functional Genomics Consortium (BayGenomics)
Email: info@baygenomics.ucsf.edu
Bequence tag generated by S' RACE of total RNA from gene trap ES
Sequence tag generated by S' RACE of total RNA from gene trap ES
cell line. ES cell lines harboring insertion mutation of target
gene are available upon request from BayGenomics. Annotation
information available from
http://baygenomics.ucsf.edu/cgi-bin/BayGearch.py?OPTION=EXACT&TYPE=
CELL_LINE&KEY=BGA402
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CV064457
WNELLID6 Wheat EST endosperm library Triticum aestivum cDNA clone WNELLID6 5' similar to Unknown Function, mRNA sequence.
CV064457.1 GI:51527634
                                                                                                                                                      Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              /cell_type="Embryonic stem cell"
/clone_lib="BayGenomics Gene Trap Library pGTlLxf"
/note="Vector: pGTlLxf"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               DB 1; Length 42;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               4; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            /organism="Triticum aestivum"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Query Match
0.7%; Score 33.6; E
Best Local Similarity 90.0%; Pred. No. 11;
Matches 36; Conservative 0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1. .42
/organism="Mus musculus"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              /db_xref="taxon:10090"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Triticum aestivum (bread wheat)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Tel: 61 2 6246 5223
Fax: 61 2 6246 5000
Email: Bill.Taylor©csiro.au
Seg primer: M13 reverse primer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  High quality sequence stop: 40.
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   /mol_type="mRNA"
/strain="129 ola"
                                                                                                 Mus musculus (house mouse)
Mus musculus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            /mol_type="mRNA"
                                CW509301 GI:53838806
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          /sex="Male"
                                                                                                                                                                                                   1 (bases 1 to 42)
BayGenomics.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Class; Gene Trap
            mRNA sequence.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         42
                                ACCESSION
VERSION
KEYWORDS
SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ACCESSION
VERSION
KEYWORDS
SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     DEFINITION
                                                                                                                                                                                                                                                TITLE
JOURNAL
COMMENT
                                                                                                                                                                                                REFERENCE
AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AUTHORS
TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  RESULT 22
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CV064457
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       용
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ઠ
/lab_host="DH10B (Life Technology)"

/clone lib="wheat EST endosperm library"

/note="vector: ZipLox; Site 1: Sal I; Site 2: Not I; mRNA
was prepared from endosperm Lisaues of the wheat cultivar
Hartog. cDNA was synthesised from pooled 6, 8, and 10 dpa
endosperm using Not I-oligo (dT)18 primer/adapter
(Pharmacia Biotech), and then ligated to the Sal I-Not I
Sal I-Xho I adapter (Stratagene). Constructed by Shahjahan
Ali and Bill Taylor."
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CW509301 42 bp mRNA linear GSS 06-OCT-2004 BGA402 BayGenomics Gene Trap Library pGT1Lxf Mus musculus cDNA,
                                                                                                                                                                                                                                                                                                                           ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           EST 23-SEP-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Ingolstaedter Landstr.1, D-85764 Neuherberg, Germany
This is the 5' sequence of the clone insert. Clone from S. Wiemann,
Molecular Genome Analysis, German Cancer Research Center (DKFZ);
Email s.wiemanna@kfz-heidelberg.de; rlin, Germany. Please contact
RZPD for ordering:
http://www.rzpd.de/cgi-bin/products/cl.cgi?CloneID=DKFZp469F0617
Further information about the clone and the sequencing project is
available at http://mips.gsf.de/projects/cdna/.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Pongo pygmaeus (orangutan)
Pongo pygmaeus
Pongo pygmaeus
Bukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Pongo.
1 (bases 1 to 40)
Ansorge,W., Krieger,S., Regiert,T., Rittmueller,C., Schwager,B.,
Mewes,H.W., Well,B., Amid,C., Osanger,A., Fobo,G., Han,M. and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    /note="Vector: pSport1_Sfi; Site_1: SfilA; Site_2: SfilB
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Pongo pygmaeus mRNA (Ansorge, W., Krieger, S., Regiert, T., et al.)
Unpublished (2004)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CK762707

DKFZp469F0617_r1 469 (synonym: pkidl) Pongo pygmaeus cDNA clone
DK72p469F0617_5', mRNA sequence.
                                                                                                                                                                                                                                                                                                                           Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Gaps
                                                                                                                                                                                                                                                                                                                           ö
                                                                                                                                                                                                                                                                         DB 1; Length 38;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 0.7%; Score 34.4; DB 1; Length 40; 97.2%; Pred. No. 9.5; It indels
                                                                                                                                                                                                                                                                                                                      1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 /organism="Pongo pygmaeus"
/mol type="mRNA"
/mol bxref="taxon:9600"
/clone="DKEZp468P0617"
/tissue_type="kidney"
/dev_stage="adult"
/lab_host="DH108"
/clone_lib="469" (synonym; pkid1)"
                                                                                                                                                                                                                                                                                                                                                                   5032 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAACTC 5067
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 5025 АДАЛАЛАЛАЛАЛАЛАЛАЛАЛАЛАЛАЛАЛАЛАЛАЛАЛА
                                                                                                                                                                                                                                                                                                                                                                                            0.7%; Score 34.4; DF 97.2%; Pred. No. 9.2; Itive 0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CR762707.1 GI:52600068
                                                                                                                                                                                                                                                            Ouery Match
Best Local Similarity 97.2<sup>3</sup>
Matches 35; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Query Match 0.77
Best Local Similarity 97.23
Matches 35; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Contact: MIPS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Wiemann, S.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Bource
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CW509301/c
LOCUS
DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     VERSION
KEYWORDS
SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         RESULT 20
CR762707
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 REFERENCE
AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         RESULT 21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   δ
                                                                                                                                                                                                                                                                                                                                                                   ò
                                                                                                                                                                                                                                                                                                                                                                                                                유
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                g
```

Gaps

```
/db xref="taxon:4565"
/db xref="taxon:4565"
/clone="wNEL7d3"
/tissue type="endosperm"
/tissue type="endosperm"
/dev_stage="developing endosperm tissue 6, 8, 10 dpa (days dev_stage="developing endosperm"
/deb.stage="developing endosperm"
/lab host="black"
/lab host="black"
/lab host="black"
/clone lib="wheat EST endosperm library"
/clone lib="wheat EST endosperm lissues of the wheat cultivar was prepared from endosperm lissues of the wheat cultivar was prepared from endosperm tissues of the wheat cultivar endosperm using Not I-oligo(dT)18 primer/adapter endosperm using Not I-oligo(dT)18 primer/adapter (Pharmacia Biotech), and then ligated to the Sal I-Not I site of ZipLox vector (Life Technology) after adding a slie of ZipLox vector (Stratagene). Constructed by Shahjahan Ali and Bill Taylor."
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CV066327 35 bp mRNA linear EST 24-AUG-2004 WNEL32e2 Wheat EST endosperm library Triticum aestivum cDNA clone
                                                                                                                                                                                                                                                                                                                                                         CV066718 ST endosperm library Triticum aestivum cDNA clone WNEL7d3 Wheat EST endosperm library Triticum aestivum cDNA clone WNEL7d3 5' similar to Unknown Function, mRNA sequence.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Enkaryota, Viridiplantae, Streptophyta; Embryophyta; Tracheophyta; Enkaryota, Viridiplantae, Streptophyta; Enliopsida; Poales; Poaceae; Spermatophyta; Magnoliophyta; Liliopsida; Poales; Poaceae; Pooideae; Triticeae; Triticum.

1 (bases I to 36)

Ali, S. Holloway, B. and Taylor, W.C.
Normalisation of cereal endosperm EST libraries for structural and functional genomic analysis
Flant Mol. Biol. Rep. 18, 123-132 (2000)

Contact: Bill Taylor
Commonwealth Scientific and Industrial Research Organisation
Sal I-Xho I adapter (Stratagene). Constructed by Shahjahan Ali and Bill Taylor."
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Division of Plant Industry.

CSIRO Plant Industry, GPO Box 1600, Canberra, ACT 2601, Australia
Tel: 61 2 6246 5223

Fax: 61 2 6246 5000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Gaps
                                                                                                                                  Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ö
                                                                                                                                  ;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          DB 1; Length 36;
                                                                                 41;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Indels
                                                                                                                                     Indels
                                                                                 1; Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1;
                                                                                                                                                                                   4 ACAAAAAAAAAAAAAAAAAAAAAAAAAAAAATTC 39
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             34
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           /organism="Triticum aestivum"
/mol_type="mRNA"
/cultivar="Hartog"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Score 32.4; D. Pred. No. 12; 0; Mismatches
                                                                                       DΒ
                                                                                 0.6%; Score 32.8; E
34.4%; Pred. No. 12;
ive 0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Email: Bill Taylor@csiro.au
Seg primer: Ml3 reverse primer
High quality sequence stop: 36.
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Triticum aestivum (bread wheat)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CV066718.1 GI:51529895
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  0.6%;
                                                                                                               ilarity 94.4%;
Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Best Local Similarity
Matches 33; Conserv
                                                                                               Query Match
Best Local Similarity
Matches 34; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                              CV066718
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    RESULT 25
CV066327
LOCUS
DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         VERSION
KEYWORDS
SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                          DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AUTHORS
TITLE
                                                                                                                                                                                                                                                                                                                              RESULT 24
CV066718
LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                              ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           g
                                                                                                                                                                                                      ò
                                                                                                                                                                                                                                                    g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               /sub_species="vulgare"
/sub_species="vulgare"
/db_xref="taxon:112509"
/clone="RNEL113g2"
/tissue_type="endosperm"
/dev_stage="developing endosperm tissue 10, 12, 15 dpa
(days post anthesis)"
/lab host="DH10B (Life Technology)"
/lone="lib="Weator: _ZipLox; Site_1: Sal I; Site_2: Not I; mRNA
/note="Vector: _ZipLox; Site_1: Sal I; Site_2: Not I; mRNA
was prepared from endosperm tissues of the barley cultivar
Himalaya. cDNA was synthesised from pooled 10, 12, and 15
dpa endosperm using Not I-oligo(dT)18 primer/adapter
(pharmacia Biotech), and then ligated to the Sal I-Not I
site of _ZipLox vector (Life Technology) after adding a
                        /cultivar="Hartog"
/db_xref="taxon:4565"
/clone="MYBLIDE"
/tissue_type="endosperm"
/tissue_type="endosperm"
/dev_stage="developing endosperm tissue 6, 8, 10 dpa (days post_anthesis)"
/lat_host="DH10B (Life Technology)"
/lat_host="LDH10B (Life Technology)"
/clone lib="Wheat EST endosperm library"
/clone lib="Wheat EST endosperm Lissues of the wheat cultivar was prepared from endosperm Lissues of the wheat cultivar Hartog. cDNA was synthesised from pooled 6, 8, and 10 dpa Hartog. cDNA was synthesised from pooled 6, 8, and 10 dpa endosperm using Not I-oligo(dT)18 primer/adapter (Pharmacia Biotech), and then ligated to the Sal I-Not I (Pharmacia Biotech), and then ligated to the Sal I-Not I site of Ziplox vector (Life Technology) after adding a site of Ziplox vector (Exratagene). Constructed by Shahjahan Ali and Bill Taylor."
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1 (bases 1 to 41)
Ali,S, Holloway,B. and Taylor,W.C.
Normalisation of cereal endosperm EST libraries for structural and functional genomic analysis
Functional genomic analysis
Contact: Bill Taylor
Commonwealth Scientific and Industrial Research Organisation
Division of Plant Industry.
CSIRO Plant Industry, GPO Box 1600, Canberra, ACT 2601, Australia
Tel: 61 2 6246 5233
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      EST 24-AUG-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Hordeum vulgare subsp. vulgare
Hordeum vulgare subsp. vulgare
Sukaryota; Viridiplantae; Streptophyta; Embryophyta; Tracheophyta;
Spermatophyta; Magnoliophyta; Liliopsida; Poales; Poaceae;
Pooideae; Triticeae; Hordeum.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CV054826 BNFL11392 Barley EST endosperm library Hordeum vulgare subsp. vulgare cDNA clone BNEL11392 5' similar to Unknown Function, mRNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ..
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         /organism="Hordeum vulgare subsp. vulgare"
/mol_type="mRNA"
/cultivar="Himalaya"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      0.7%; Score 33.4; DB 1; Length 40;
97.1%; Pred. No. 11;
ative 0; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             5022 TGTAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 5056
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Tel: 61 2 6246 5223
Fax: 61 2 6246 5000
Email: Bill.Taylor@csiro.au
Seq primer: M13 reverse primer
High quality sequence stop: 41.
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CV054826
CV054826.1 GI:51517847
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1. .41
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Query Match
Best Local Simi
Matches 34;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AUTHORS
TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     RESULT 23
CV054826
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                VERSION
KEYWORDS
SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              COMMENT
```

```
Hordeum vulgare subsp. vulgare
Eukaryorda, Varidiplantee; Streptophyta; Embryophyta; Tracheophyta;
Eukaryora; Varidiplantee; Streptophyta; Embryophyta; Tracheophyta;
Eukaryora; Varidiplantee; Streptophyta; Embryophyta; Tracheophyta;
Spermatophyta; Magnollophyta; Liliopsida; Poales; Poaceae;
Pooideae; Triticeae; Hordeum;
El (bases 1 to 37)

Ali,S, Holloway, B. and Taylor, W.C.
Normalisation of cereal endosperm EST libraries for structural and functional genomic analysis
Ali, Plant Mol. Biol. Rep. 18, 123-132 (2000)
Contact: Bill Taylor
Commonwealth Scientific and Industrial Research Organisation
Division of Plant Industry, GPO Box 1600, Canberra, ACT 2601, Australia
                                                                                                                                                                                                                                                                              /mol type="mRNA"
/cultivar="Bluecrop"
/cultivar="Bluecrop"
/du type="reaxon:6926"
/du xrefe="taxon:6926"
/dev stage="Mature plants"
/dev stage="Mature plants"
/dev stage="Mature plants"
/clone lib="CDNA non acclimated Bluecrop library"
/clone lib="con Bluescript SK'; cDNA clones from Vaccinium
corymbosum cv. Bluecrop, RNA for preparation of library
was extracted from flower buds collected in the fall from
non acclimated plants"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            /tiseue_type="endosperm"
/dev stage="developing endosperm tissue 10, 12, 15 dpa
/dev stage="developing endosperm tissue 10, 12, 15 dpa
/dev stage="tanthesia"
/lab host="bhost="black"
/clone_lib="Barley EST endosperm library"
/note="Vector: _ZipLox; Site_1: Sal I; Site_2: Not I; mRNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CV055204 37 bp mRNA linear EST 24-AUG-2004 BNEL118all Barley EST endosperm library Hordeum vulgare subsp. vulgare cDNA clone BNEL118all 5' similar to Unknown Function, mRNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Gaps
                        Fruit Lab

US Department of Agriculture (USDA), ARS, PSI

B169 010A, 10300 Baltimore avenue, BARC West, Beltsville, MD

20705-2350, USA

Tel: 301-504-6654

Fax: 301-504-5653

Email: rowlandj@ba.ars.usda.gov.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            DB 1; Length 36;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            /organism="Hordeum vulgare subsp. vulgare"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          linear
                                                                                                                                                                                                                                                                /organism="Vaccinium corymbosum'
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            34 GTCAAANNAAAAAAAAAAAAAAAAAAAAA 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            5023 GTAAAAAAAAAAAAAAAAAAAAAAAAAAAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Score 30.4; D
Pred. No. 15;
0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Tel: 61 2 6246 5223
Fax: 61 2 6246 5000
Email: Bill.Taylor@csiro.au
Seq primer: M13 reverse primer
High quality sequence stop: 37.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    /sub_species="vulgare"
/db_xref="taxon:112509"
/clone="BNEL118a11"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 /mol_type="mRNA"
/cultivar="Himalaya"
                                                                                                                                                                                                             Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CV055204.1 GI:51518306
  Contact: Rowland, L.J.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      0.6%;
ilarity 91.2%;
Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Query Match
Best Local Simi
Matches 31;
                                                                                                                                                                                                                                        source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AUTHORS
TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            RESULT 27
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     VERSION
KEYWORDS
                                                                                                                                                                                                           FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CV055204
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         FEATURES
     COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       /tissue_type="endosperm"
/dev_stage="developing endosperm tissue 6, 8, 10 dpa (days post anthesia)"
/lab host="bH10B (life Technology)"
/lab host="bH10B (life Technology)"
/clone_lib="Wheat EST endosperm library"
/clone_lib="wheat EST endosperm listary"
/note="Vector: ZipLox; Site_l: Sal I; Site_2: Not I; mRNA was prepared from endosperm tissues of the wheat cultivar Hartog. cDNA was synthesised from pooled 6, 8, and 10 dpa endosperm using Not I-oligo(dT)18 primer/adapter
(Pharmacia Biotech), and then ligated to the Sal I-Not I site of ZipLox vector (Life Technology) after adding a Sal I-Xho I adapter (Stratagene). Constructed by Shahjahan Ali and Bill Taylor."
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CV091545 36-AUG-2004
NAILLI R CDNA non acclimated Bluecrop library Vaccinium corymbosum CDNA 37, mRNA sequence.
CV091545
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ó
                                                                                          Triticum aestivum (bread wheat)
Triticum aestivum
Eukaryota, Viridiplantae, Streptophyta, Embryophyta, Tracheophyta,
Spermatophyta, Magnoliophyta, Liliopsida, Poales, Poaceae,
Pooideae, Triticeae, Triticum.
                                                                                                                                                                                                                                                Ali,S. Holloway,B. and Taylor,W.C.
Normalisation of cereal endosperm EST libraries for structural and functional genomic analysis
Plant Mol. Biol. Rep. 18, 123-132 (2000)
Contact: Bill Taylor
Commonwealth Scientific and Industrial Research Organisation
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Vaccinium corymbosum
Vaccinium corymbosum
Eukaryota; Viridiplantae; Streptophyta; Embryophyta; Tracheophyta;
                                                                                                                                                                                                                                                                                                                                                                                                         Division of Plant Industry.

CSIRO Plant Industry.

CSIRO Plant Industry.

CSIRO Plant Industry.

Fax: 61 2 6246 5223

Email: Bill.Taylor@csiro.au

Seq primer: Mil reverse primer

High quality sequence stop: 35.

Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1 (bases 1 to 36)
Dhanaraj,A.L., Alkharouf,N.W., Beard,H.S., Chouikha,I.B.,
Matthews,B.F. and Rowland,L.J.
Monitoring gene expression changes during cold acclimation of
blueberry (Vaccinium corymbosum L.) using a cDNA microarray
Unpublished (2004)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Spermatophyta; Magnoliophyta; eudicotyledons; core eudicots; asterids; Ericales; Ericaceae; Vaccinioideae; Vaccinieae;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ö
WNEL32e2 5' similar to Unknown Function, mRNA sequence.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           0.6%; Score 31.4; DB 1; Length 35; 97.0%; Pred. No. 13; ative 0; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                5035 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAACTC 5067
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               /organism="Triticum aestivum"
/mol_type="mRNA"
/cultivar="Hartog"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              /db_xref="taxon:4565"
/clone="WNEL32e2"
                                             CV066327.1 GI:51529504
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CV091545.1 GI:51570884
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Vaccinium.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           32;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           RESULT 26
CV091545/c
                                                VERSION
KEYWORDS
SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 VERSION
KEYWORDS
SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      LOCUS
DEFINITION
                                                                                                                                                                                                                             REFERENCE
AUTHORS
TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Matches
                        ACCESSION
                                                                                                                                                                                                                                                                                                                                   JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              FEATURES
                                                                                                                                                                                                                                                                                                                                                              COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ઠે
```

8

```
/tissue_rype="endosperm"
/tissue_rype="endosperm"
/dev_stage="developing endosperm tissue 6, 8, 10 dpa (days post anthesis)"
/lab_host="Hulbe [Life Technology)"
/lab_host="Hulbe [Life Technology)"
/clone lib="Wheat EST endosperm library"
/clone lib="Wheat EST endosperm lissue; it, Site_2: Not I; mRNA /note="Vector: ZipLox; Site_1: Sal I; Site_2: Not I; mRNA /note="Vector: ZipLox; Site_1: Sal I; Site_2: Not I; mRNA /note="Vector: ZipLox; Site_1: Sal I; Site_2: Not I of yardsperm using Not I-oligo(dT)18 primer/adapter endosperm using Not I-oligo(dT)18 primer/adapter (Pharmacia Biotech), and then ligated to the Sal I-Not I (Pharmacia Biotech), and then ligated to the Sal I-Not I site of ZipLox vector (Life Technology) after adding a Sal I-Xho I adapter (Stratagene). Constructed by Shahjahan Ali and Bill Taylor."
                                                                                                 Triticum destivum
Enkaryota, Viridiplantae; Streptophyta; Embryophyta; Tracheophyta;
Spermatophyta; Magnoliophyta; Liliopsida; Poales; Poaceae;
Spermatophyta; Magnoliophyta; Liliopsida; Poales; Poaceae;
Pooldeae; Triticaee; Triticum.

CE 1 (bases 1 to 35)

Al j, S, Holloway, B. and Taylor, W.C.

Anis, Holloway, B. and Taylor.

A Normalisation of cereal endosperm EST libraries for structural and functional genomic analysis

AL Plant Mol. Rep. 18, 123-132 (2000)

Contact: Bill Taylor

Commonwealth Scientific and Industrial Research Organisation
Division of Plant Industry.

COMMONWEALTH SCIENTIFIC and Industrial Research Organisation
Division of Plant Industry.

COMMONWEALTH SCIENTIFIC and Industry.

COMMONWEALTH SCIENTIFIC AND SON 1600, Canberra, ACT 2601, Australia

Tel: 61 2 6246 5000

Email: Bill.Taylor@csiro.au

Seq primer: M13 reverse primer

High quality sequence stop: 35.

Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Hordeum vulgare subsp. vulgare
Hordeum vulgare subsp. vulgare
Bukaryota; Viridiplantae; Streptophyta; Embryophyta; Tracheophyta;
Spermatophyta; Magnoliophyta; Liliopsida; Poales; Poaceae;
Pooideae; Triticeae; Hordeum.
1 (bases 1 to 31)
Ali,S, Holloway,B. and Taylor,W.C.
Normalisation of cereal endosperm EST libraries for structural and functional genomic analysis
Functional genomic analysis
Plant Mol. Biol. Rep. 18, 123-132 (2000)
Contact: Bill Taylor.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  EST 24-AUG-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CV057897 11 bp mRNA linear EST 24-AUG-20
BNEL32a8 Barley EST endosperm library Hordeum vulgare subsp.
vulgare cDNA clone BNEL32a8 5' similar to Unknown Function, mRNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Commonwealth Scientific and Industrial Research Organisation
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         DB 1; Length 35;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         2;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAATTTC 33
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1. .35
/organism="Triticum aestivum"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Score 29.8; DE; Pred. No. 16; 0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      /mol_type="mRNA"
/cultivar="Hartog"
/db_xref="taxon:4565"
/clone="WNBL10h12"
                                                                                   Triticum aestivum (bread wheat)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CV057897
CV057897.1 GI:51521036
                       GI:51527609
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                0.6%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Query Match 0.6
Best Local Similarity 93.9
Matches 31; Conservative
                              CV064432.1
CV064432
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             LOCUS
DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             RESULT 30
CV057897
                          VERSION
KEYWORDS
SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    VERSION
KEYWORDS
                                                                                                                                                                                                                                                                                      AUTHORS
TITLE
                                                                                                                                                                                                                                                                                                                                                                                 JOURNAL
ACCESSION
                                                                                                                                                                                                                                                        REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                  COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Ωp
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CV064432 Mheat EST 24-AUG-2004 WNEL10h12 Wheat EST condeperm library Triticum aestivum cDNA clone WNEL10h12 5' similar to Unknown Function, mRNA sequence.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ö
was prepared from endosperm tissues of the barley cultivar Himalaya. CDNA was synthesised from pooled 10, 12, and 15 dpa endosperm using Not I-oligo(dT)18 primer/adapter (Pharmacia Biotech), and then ligated to the Sal I-Not I site of ZipLox vector (Life Technology) after adding a Sal I-No I adapter (Stratagene). Constructed by Shahjahan Ali and Bill Taylor."
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CW020481
GC0748 TIGEM gene trap library Mus musculus cDNA clone A015.C10,
                                                                                                                                                                                                                                                                                                                                  ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Tel: +390815132205

Fax: +390815132205

Email: cobellis@tigem.it

Sequence tag generated by 5' RACE of total RNA from gene trap ES

Sequence tag generated by some sequence of the sequence of tage of the sequence of the sequence of tage of the sequence of tage of tage of the sequence of tage of
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Eukaryota; Mctazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Eukaryota; Mctazoa; Rodentia; Sciurognathi; Muridae; Murinae; Mus. Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Musinae; Mus. 1 (bases 1 to 30)
Cobellis,G., Nicolaus,G., Marra,E., Barbarisi,M., Sardiello,M., Di Giorgio,F.B., Iovino,N., Zollo,M., Ballabio,A. and Cortese,R. Tagging genes with cassette-exchange sites
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Gaps
                                                                                                                                                                                                                                                                                                                                  Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ;
0
                                                                                                                                                                                                                                                                                                                                  ö
                                                                                                                                                                                                                                                               DB 1; Length 37;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Length 30;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 0; Indels
                                                                                                                                                                                                                                                                                                                                  Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       /cell_type="Embryonic stem cell"
/cell_line="El4"
/clone_lib="TIGEM gene trap library"
/note="Vector: pFLIP1"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Via P. Castellino, 111, 80131 NAPOLI, ITALY
                                                                                                                                                                                                                                                                                                                                     1,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ä
                                                                                                                                                                                                                                                                                                                                                                                              5036 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAACTC 5067
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       0.6%; Sco...
100.0%; Pred. No. ...
0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             5025 АААААААААААААААААААААААААА
                                                                                                                                                                                                                                                                                                                                                                                                                                                          0.6%; Score 30.4; D
larity 96.9%; Pred. No. 15;
Conservative 0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          30 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     /organism="Mus musculus"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            /mol type="mRNA"
/strain="129 ola"
/db xref="taxon:10090"
/clone="A015.C10"
/sex="male"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Mus musculus (house mouse)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CW020481.1 GI:52789741
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Class: Gene Trap.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Contact: TIGEM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  mRNA sequence.
CW020481
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Best Local Similarity
                                                                                                                                                                                                                                                                                                              Best Local Similarity
Matches 31; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TIGEM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  30;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Query Match
                                                                                                                                                                                                                                                                                   Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     RESULT 29
CV064432
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CW020481/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TITLE
JOURNAL
COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       REFERENCE
AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        VERSION
KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ઠે
```

ô

Gape

ö

EST 04-MAY-1995

```
In manufactors (1995)
Contact: Wilson RK
Washington University School of Medicine
Washington University School of Medicine
4444 Forest Parkway, Box 8501, St. Louis, MO 63108
Tel: 314 286 1800
Fax: 314 286 1810
Email: set@wataon.wustl.edu
Insert Size: 2331
High quality sequence starts: 1 High quality sequence stops: 1
Source: IMAGE Consortium, Linix This clone is available royalty-free through Linix; contact the IMAGE Consortium (info@image.llnl.gov)
for further information. Trace considered overall poor quality
Insert Length: 2331 Std Error: 0.00
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               /clone_lib="OsHDAC1-overexpressing transgenic rice lambda phage cDNA library [(HDA1)" | /note="Vector: pBluescript S(+); Site 1: EcoRI; Site 2: XhoI; Callus was tracted with ABA(20um) for lhour. cDNA was inserted into lambda Uni-ZAP XR vector at 5' end with EcoRI and 3' end with XhoI site. mRNA was destived from rice Histone Deacetylase overexpression line."
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
1 (bases 1 to 33)
Hillier,L., Clark,N., Dubuque,T., Elliston,K., Hawkins,M.,
Holman,M., Hultman,M., Kucaba,T., Le,M., Lennon,G., Marra,M.,
Parsons,J., Rifkin,L., Rohlfing,T., Soares,M., Tan,P.,
Trevaskis,E., Waterston,R., Williamson,A., Wohldmann,P. and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ydo3g06.sl Soares infant brain INIB Homo sapiens cDNA clone IMAGE:24658 3' similar to gb:Al8658 INSULIN RECEPTOR PRECURSOR (HUMAN);, mRNA sequence.
                                                                                                                                                                                                                                                                                                                                                           0.5%; Score 27; DB 1; Length 28;
                                                                                                                                                                                                                                                                                                                                                                                                                                       0; Indela
                                                                                                                                                                                                                                                                                                                                   Query Match
Best Local Similarity 100.0%; Pred. No. 20,
Matches 27; Conservative 0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                       Pred. No. 20;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1. .33
/organism="Homo sapiens"
/mol_type="mRNA"
/db_xref="GDB:397005"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1 CCCGGGCTGCAGGAATTCGGCACGAGG 27
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   7 CCCGGCTGCAGGAATTCGGCACGAGG 33
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               /db_xref="taxon:9606"
/clone="IMAGE:24658"
/sex="female"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           High quality sequence stop: 1. 
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               The WashU-Merck EST Project
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Insert Length: 2331
Seg primer: -21m13
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Homo sapiens (human)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   R38731.1 GI:796187
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Wilson, R.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   VERSION
KEYWORDS
SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Bource
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           RESULT 32
R38731/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       REFERENCE
AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TITLE
JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       원
                                                                                                                                                                                                                                                                                                                                                                                                                                                       / Sub_ species="vulgate"

/ bb xref="taxon:112509"

/ clone="Nulgate"

/ tissue="nulgate"

/ tissue="nulgate"

/ tissue="nulgate"

/ tissue="nulgate"

/ tissue="nulgate"

/ dev_stage="developing endosperm tissue 10, 12, 15 dpa

/ dav_stage="developing endosperm tissue 10, 12, 15 dpa

/ dav_stage="developing endosperm library"

/ lab_host="NulloB (Life Technology)"

/ clone="vector: _zipLox; Site_1: Sal I; Site_2: Not I; mRNA

was prepared from endosperm tissues of the Barley cultivar

Himalaya = Synthesis Synth
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Oryca sativa (japonica cultivar-group)
Oryca sativa (japonica cultivar-group)

Bukaryota; Viridiplantae; Streptcophyta; Embryophyta; Tracheophyta; Spermatophyta; Majlantae; Streptcophyta; Embryophyta; Tracheophyta; Spermatophyta; Majlantae; Streptcophyta; Entartoideae; Orycae; 
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           HDA1--01-C11.g1 OBHDAC1-overexpressing transgenic rice lambda phage cDNA library I (HDA1) Oryza sativa (japonica cultivar-group) cDNA CElone HDA1--01-C11, mRNA sequence.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   /dev_stage="proliferated callus on 2N6 media for 2 weeks"
                                   .
Box 1600, Canberra, ACT 2601, Australia
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               /organism="Oryza sativa (japonica cultivar-group)"
/mol_type="mRNA"
/cultivar="Nackdong"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           DB 1; Length 31;
                                                                                                                                                                                                                                                                                                                                                       'organism="Hordeum vulgare subsp. vulgare"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       5037 AAAAAAAAAAAAAAAAAAAAAAAAAAAAACTC 5067
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1 AAAAAAAAAAAAAAAAAAAAAAAAAATTC 31
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Score 29.4; I
Pred. No. 16;
Division of Plant Industry.
CSIRO Plant Industry, GPO Box 160
Tel: 61 2 6246 5223
Fax: 61 2 6246 5000
Email: Bill.Taylor@csiro.au
Seq primer: Mi3 reverse primer
High quality sequence stop: 31.
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               /db_xref="taxon:39947"
/clone="HDA1--01-C11"
/tissue_type="callus"
                                                                                                                                                                                                                                                                                                                                                                                       /mol_type="mRNA"
/cultivar="Himalaya"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CF305592.1 GI:33677353
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       0.6%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Query Match
Best Local Similarity
Matches 30; Conserv
                                                                                                                                                                                                                                                                                                                           Source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           VERSION
KEYWORDS
SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Best Loca
Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TITLE
JOURNAL
COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           RESULT 31
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   REFERENCE
                                                                                                                                                                                                                                                                           FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CF305592
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       FEATURES
```

ð g

VERSION KEYWORDS SOURCE ORGANISM

REFERENCE AUTHORS

TITLE

JOURNAL

COMMENT

FEATURES

DEFINITION

ACCESSION

RESULT 33 CV066570

g ò

```
BW588370 Sutaka Satou unpublished cDNA library (csefl) Ciona Bw588370 Yutaka Satou unpublished cDNA library (csefl) Ciona savignyi cDNA clone csef003122 5', mRNA sequence.
BW588370 GI:51839170
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Ciona savignyi
Eukaryota, Metazoa, Chordata, Urochordata, Ascidiacea, Enterogona,
Phlebobranchia, Cionidae, Ciona.
                                                                                                                        Bukaryota, Metazoa, Chordata, Craniata, Vertebrata, Euteleostomi, Bukaryota, Eutheria, Rodentia, Sciurognathi, Muridae, Murinae, Mus. 1 (bases 1 to 31)

Marra, M., Hillier, L., Allen, M., Bowles, M., Dietrich, N., Dubuque, T., Marra, M., Hillier, T., Allen, M., Martin, J., Morris, M., Geisel, S., Kucaba, T., Leo, M., Martin, J., Morris, M., Geisellenberg, K., Steptoe, M., Tan, F., Underwood, K., Moore, B., Theising, B., Wylie, T., Lennon, G., Soares, B., Wilson, R. and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    This clone is available royalty-free through LiNL; contact the This Concertium (info@image.llnl.gov) for further information. IMAGE Consortium (info@image.llnl.gov) for further information. MGI:693221

Trace considered overall poor quality
Possible reversed clone: similarity on wrong strand
Seq primer: -26m13 rev2 ET from Amersham
High quality sequence stop: 1.
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                              Contact: Marra M/Mouse EST Project
WashD-HFMI Mouse EST Project
Washington University School of MedicineP
4444 Forest Park Parkway, Box 8501, St. Louis, MO 63108
Fal: 314 286 1800
Fax: 314 286 1810
Email: mouseset@watson.wustl.edu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Length 31;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       DB 1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            4068 TIGGGACATGAGGTICCAGTIGCCAATTICA 4098
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                0.5%; Score 24.6; E
ilarity 87.1%; Pred. No. 29;
Conservative 0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1. .31
/organism="Mus musculus"
/mol_type="mRNA"
/strain="C57BL/6J"
                                                                                                                                                                                                                                                                                                                                                                                     The WashU-HHMI Mouse EST Project
Unpublished (1996)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                /db_xref="taxon:10090"
/clone="IMAGE:1344429"
                                                                                      Mus musculus (house mouse)
                              GI:3682084
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Ciona savignyi
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Similarity
                                                                                                                                                                                                                                                                                                                                                                               Waterston, R.
                                 AI153615.1
AI153615
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                27;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Query Match
Best Local S
Matches 27
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 VERSION
KEYWORDS
SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      RESULT 35
BW588370/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                DEFINITION
                                 VERSION
KEYWORDS
SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ACCESSION
                                                                                                                                                                                                                        REFERENCE
AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                           JOURNAL
      ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           /tissue_language...
/tissue_language...
/tissue_language...
/dev stage...developing endosperm tissue 6, 8, 10 dpa (days post_anthesis)...
/lab host="mind" (life Technology)...
/lab host="mind" (life Technology)...
/clone_lib="wheat EST endosperm library...
/clone_lib="wheat EST endosperm library...
/note="wheat Git endosperm library...
/note="weetor is zipLox; Site_l: Sal I; Site_2: Not I; mRNA /note="weetor from endosperm tissues of the wheat cultivar was prepared from endosperm tissues of the wheat cultivar was prepared from pooled 6, 8, and 10 dpa endosperm using Not I--oligo(dT)18 primer/adapte.
(Pharmacia Biotech), and then ligated to the Sal I-Not I sipLox vector (Life Technology) after adding a site of ZipLox vector (Life Technology) after adding a site of ZipLox vector (Site Technology) after adding a site and Bill Taylor...
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Enkaryota, Magnoliophyta; Embryophyta; Tracheophyta; Enkaryota; Viridiplantae; Streptophyta; Embryophyta; Tracheophyta; Spermatophyta; Magnoliophyta; Liliopsida; Poales; Poaceae; Pooideae; Triticeae; Triticum.

1. (bases 1 to 31)
1. (bases 2 to 31)
1. (contact: Bill Taylor
1. (commonwealth Scientific and Industrial Research Organisation
1. (commonwealth Scientific and Industry)
1. (commonwealth Industry)
1. (commonwealth Industry)
1. (commonwealth Scientific and Industr
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   EST 30-SEP-1998
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ö
                                                                                                                                                                                                                                                                                                                                                                                  CV066570 31 bp mRNA linear EST 24-AUG-2004 WNELSFI1 Wheat EST endosperm library Triticum aestivum cDNA clone WNELSF11 S' similar to Unknown Function, mRNA sequence. CV066570.1 GI:51529747
                                                                                                       ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AI153615 31 bp mRNA linear EST 30-SEP-19vz89f11.r1 Scares thymus 2NbMT Mus musculus cDNA clone IMAGE:1344429 5' similar to TR:Q99570 Q99570 ADAPTOR PROTEIN. ;, mRNA sequence.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Gaps
                                                                                                              Gaps
                                                                                                              ;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Length 31;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Indels
                                           0.5%; Score 25; DB 1; Length 33; 84.8%; Pred. No. 28; tive 0; Mismatches 5; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            DB 1;
                                                                                                                                                                             5025 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 5057
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1. .31
/organism="Triticum aestivum"
/mol type="mRNA"
/culTivar="Hartog"___
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ; Score 24.8; DE; Pred. No. 28; 0; Mismatches
                                                                                                                                                                                                                                      ACAAAAAAAAAAAAAAAAAAATTC 29
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Email: Bill Taylor@csiro.au
Seg primer: Ml3 reverses primer
High quality sequence stop: 31.
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        /db_xref="taxon:4565"
/clone="WNEL5f11"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Triticum aestivum (bread wheat)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                0.5%;
ilarity 92.9%;
Conservative (
                                                            Query Match 0.5
Best Local Similarity 84.8
Matches 28; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         56;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Query Match
Best Local S:
Matches 26
```

ö

Gaps

; 0

RESULT 34 AI153615 LOCUS DEFINITION

셤

```
/mol_type="mRNA"
/cultivar="Bluecrop"
/db_xref="Laxon:6926"
/db xref="Laxon:6926"
/tissue type="Plower buds including bud scales"
/dev_stage="Mature plants"
/dev_stage="Mature plants"
/clone lib="cDNA non acclimated Bluecrop library"
/note="Vector: pBluescript SK-; cDNA clones from Vaccinium
corymbosum cv. Bluecrop, RNA for preparation of library
was extracted from flower buds collected in the fall from
                                                                                                                                                28 bp mRNA linear EST 26-AUG-2004
NA1103 R cDNA non acclimated Bluecrop library Vaccinium corymbosum
CV091538
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CV065010

28 bp mRNA linear EST 24-AUG-2004
WNEL18a9 Wheat EST endosperm library Triticum aegtivum cDNA clone
WNEL18a9 5' similar to Unknown Function, mRNA sequence.
CV065010.

CV065010.1 GI:51528187
       ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ö
                                                                                                                                                                                                                                                                                                                               Eukaryota, Viridiplantae, Straptophyta, Embryophyta, Tracheophyta, Spermatophyta, Magnoliophyta, eudicotyledons, core eudicots, asterids, Ericales, Ericaceae, Vaccinioideae, Vaccinieae,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Eukaryota; Viridiplantae; Streptophyta; Embryophyta; Tracheophyta; Spermatophyta; Magnoliophyta; Liliopsida; Poales; Poaceae; Pooideae; Triticae; Triticum.

1 (Bases 1 to 28)
Ali,S, Holloway,B. and Taylor,W.C.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ö
       Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Gapa
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         US Department of Agriculture (USDA), ARS, PSI
Bldg 010A, 10300 Baltimore avenue, BARC West, Beltsville, MD
20705-2350, USA
Tel: 301-504-6654
Fax: 301-504-5655
Email: rowlandj@ba.ars.usda.gov.
                                                                                                                                                                                                                                                                                                                                                                                                                                                              Monitoring gene expression changes during cold acclimation oblueberry (Vaccinium corymbosum L.) using a cDNA microarray Unpublished (2004)
                                                                                                                                                                                                                                                                                                                                                                                                    1 (bases 1 to 28)
Dhanaraj, A.L., Alkharouf, N.W., Beard, H.S., Chouikha, I.B.,
Matthews, B.F. and Rowland, L.J.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         .
0
       ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               0.4%; Score 22.8; DB 1; Length 28; B5.7%; Pred. No. 34;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       4; Indels
       2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   /organism="Vaccinium corymbosum"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Pred. No. 34;
0; Mismatches
       0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             5025 AAAAAAAAAAAAAAAAAAAAAAAAA 5052
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Triticum aestivum (bread wheat)
Triticum aestivum
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            non acclimated plants"
                                                                               TAACAATAAAAAAAAAAAAAAAA
                                           5024 TAAAAAAAAAAAAAAAAAAAAAA
                                                                                                                                                                                                                                                     CV091538.1 GI:51570877
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Contact: Rowland, L.J.
                                                                                                                                                                                                                                                                                         Vaccinium corymbosum
Vaccinium corymbosum
     24; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Best Local Similarity
Matches 24; Conserv
                                                                                                                                                                                                                                                                                                                                                                                        Vaccinium.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Fruit Lab
                                                                               56
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              28
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Query Match
                                                                                                                                                                                                                                                   VERSION
KEYWORDS
SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   source
                                                                                                                                      RESULT 37
CV091538/c
                                                                                                                                                                                            DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ORGANISM
     Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        RESULT 38
CV065010
                                                                                                                                                                                                                                 ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                        REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                            AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       VERSION
KEYWORDS
SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                              TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       COMMENT
                                                                             셤
                                           à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              원
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CW020478 28-SEP-2004 GC0745 TIGEM gene trap library Mus musculus cDNA clone A015.B4, mRNA sequence.
                                                                                                                                                                                                                                                                                                                         /dev_stage="egg"
/clone_lib="Yutaka Satou unpublished cDNA library (csef1)"
                                                                                                                                                                                                                                                                                                                                                                                                                            ô
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Via P. Castellino, 111, 80131 NAPOLI, ITALY
Tel: +390816132205
Exa: +390815790919
Email: cobellisetigem.it
Sequence tag generated by 5' RACE of total RNA from gene trap ES
equence are available upon request from TIGEM. Annotation information
available from TIGEM
1 (bases 1 to 31)
Satou, Y., Shin-i, T., Kohara, Y. and Satoh, N.
Expressed genes in Ciona savignyi (Satou, Shin-i, Kohara, Satoh)
Unpublished (2004)
Contact: Yutaka Satou
Department of Zoology
                                                                                                                                                                                                                                                                                                                                                                                                                            Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                            ö
                                                                                                                                                                                                                                                                                                                                                                                    DB 1; Length 31;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          DB 1; Length 26;
                                                                                                                                                                                                                                                                                                                                                                                                                          Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     /sex="male"
/cell type="Embryonic stem cell"
/cell_line="E14"
/clone_lib="TiGEM gene trap library"
/note="Vector: pFLIP1"
                                                                                                                                                                                        Email: yutaka@ascidian.zool.kyoto-u.ac.jp.
Location/Qualifiers
                                                                                                             Kyóro University
Sakyo-ku, Kyoto, Kyoto 606-8502, Japan
Tel: 81-75-753-4095
Fax: 81-75-705-1113
                                                                                                                                                                                                                                                                                                                                                                                  0.5%; Score 24.4; D
96.2%; Pred. No. 29;
tive 0; Mismatches
                                                                                                                                                                                                                                               /organism="Ciona savignyi"
/mol type="mRNA"
/db_xref="taxon:51511"
/clone="csef003122"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          0.4%; Score 22.8; I
92.3%; Pred. No. 33;
                                                                                                                                                                                                                                                                                                                                                                                                                                                              5045 AAAAAAAAAAAAAAAAAACTCGAG 5070
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            /organism="Mus musculus"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   /db_xref="taxon:10090"
/clone="A015.B4"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     29 ATAAAAAAAAAAAAAAAAACTCGAG 4
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             /mol_type="mRNA"
/strain="129 ola"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CW020478.1 GI:52789738
                                                                                                                                                                                                                                                                                                                                                                                                                        Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Class: Gene Trap
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Contact: TIGEM
                                                                                                                                                                                                                                                                                                                                                                              Query Match
Best Local Similarity
Matches 25; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CW02047
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TIGEM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              GSS.
                                                                                                                                                                                                                                 Bource
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CW020478/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ORGANISM
REFERENCE
AUTHORS
TITLE
JOURNAL
COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         REFERENCE
AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TITLE
JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            VERSION
KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         RESULT 36
                                                                                                                                                                                                            FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               SOURCE
```

ઠે

```
/tioure= mubiliary
/tissue_type="endosperm"
/dev stage="developing endosperm tissue 6, 8, 10 dpa (days
/dev stage="endosperg endosperm tissue 1, 10 dpa (days
post_anthesis)"
/lab host="MloB (Life Technology)"
/lab host="MloB (Life Technology)"
/clone lib="Wheat EST endosperm library"
/clone lib="Wheat EST endosperm lisal; Site 2: Not I; mRNA
/note="Vector: ZipLox; Site 1: Sal 1; Site 2: Not I; mRNA
/note="Vector: ZipLox; Site 1: Sal 2; Site 2: Not I; mRNA
/note="Vector: ZipLox; Site 1: Sal 2; Site 2: Not I; mRNA
/note="Vector: ZipLox; Site 1: Sal 2; Site 3
// Hartog. cDNA was synthesised from pooled 6, 8, and 10 dpa
/Hartog. cDNA was synthesised from pooled 6, 8, and 10 dpa
/Hartog. cDNA was synthesised from pooled 6, 8, and 10 dpa
/Hartog. cDNA was synthesised from pooled 6, 8, and 10 dpa
/Hartog. cDNA was synthesised from pooled 6, 8, and 10 dpa
/Hartog. cDNA was synthesised from pooled 6, 8, and 10 dpa
/Hartog. cDNA was synthesised from pooled 6, 8, and 10 dpa
/Hartog. cDNA was synthesised from pooled 6, 8, and 10 dpa
/Hartog. cDNA was synthesised from pooled 6, 8, and 10 dpa
/Hartog. cDNA was synthesised from pooled 6, 8, and 10 dpa
/Hartog. cDNA was synthesised from pooled 6, 8, and 10 dpa
/Hartog. cDNA was synthesised from pooled 6, 8, and 10 dpa
/Hartog. cDNA was synthesised from pooled 6, 8, and 10 dpa
/Hartog. cDNA was synthesised from pooled 6, 8, and 10 dpa
/Hartog. cDNA was synthesised from pooled 6, 8, and 10 dpa
/Hartog. cDNA was synthesised from pooled 6, 8, and 10 dpa
/Hartog. cDNA was synthesised from pooled 6, 8, and 10 dpa
/Hartog. cDNA was synthesised from pooled 6, 8, and 10 dpa
/Hartog. cDNA was synthesised from pooled 6, 8, and 10 dpa
/Hartog. cDNA was synthesised from pooled 6, 8, and 10 dpa
/Hartog. cDNA was synthesised from pooled 6, 8, and 10 dpa
/Hartog. cDNA was synthesised from pooled 6, 8, and 10 dpa
/Hartog. cDNA was synthesised from pooled 6, 8, and 10 dpa
/Hartog. cDNA was synthesised from pooled 6, 8, and 10 dpa
/Hartog. cDNA was synthesised from pooled 6, 8, and 10 dpa
/Harto
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CV064628 Heat EST endosperm library Triticum aestivum cDNA clone WNEL13b6 Wheat EST endosperm library Triticum aestivum cDNA clone WNEL13b6 5' similar to Unknown Function, mRNA sequence.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      functional genomic analysis
Plant Mol. Biol. Rep. 18, 123-132 (2000)
Contact: Bill Taylor
Commonwealth Scientific and Industrial Research Organisation
Division of Plant Industry,
CSIRO Plant Industry, GPO Box 1600, Canberra, ACT 2601, Australia
CSIRO Plant Industry, GPO Box 1600, Canberra, ACT 2601, Bustralia
Tel: 61 2 6246 5223
Fax: 61 2 6246 5000
Email: Bill.Taylor@csiro.au
Seq primer: Mi3 reverse primer
High quality sequence ctop: 23.
High quality sequence etop: 23.
                                                        Triticum aestivum
Bukaryota, Viridiplantae, Streptophyta; Embryophyta; Tracheophyta;
Spermatophyta; Magnoliophyta; Liliopsida; Poales; Poaceae;
Pooideae; Triticeae; Triticum.
I (bases 1 to 23)
Ali, S, Holloway, B. and Taylor, W.C.
Normalisation of cereal endosperm EST libraries for structural and
                                                                                                                                                                                                                                                                                                                                                                                              Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ô
                                                                                                                                                                                                                                                                                                                                                                                           ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           DB 1; Length 23;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Indels
                                                                                                                                                                                                                                                                                                                                              DB 1; Length 20;
                                                                                                                                                                                                                                                                                                                                                                                           0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ..
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                /organism="Triticum aestivum"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              0.4%; Score 19.4; I 95.2%; Pred. No. 47; Live 0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                              0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                        Pred. No.
                                                                                                                                                                                                                                                                                                                                                    Score 20;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Triticum aestivum (bread wheat)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     /db_xref="taxon:4565"
/clone="WNEL13b6"
db_xref="taxon:39947"
                         /clone="HDA1--01-C09"
/tissue_type="callus"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  /mol_type="mRNA"
/cultivar="Hartog"
                                                                                                                                                                                                                                                                                                                                                                                                                                                    11 GGCTGCAGGAATTCGGCACG 30
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1 GGCTGCAGGAATTCGGCACG 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CV064628.1 GI:51527805
                                                                                                                                                                                                                                                                                                                                                    0.4%; (
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Conservative
                                                                                                                                                                                                                                                                                                                                                         Query Match
Best Local Similarity 100.
Matches 20; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Query Match
Best Local Similarity
Matches 20; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AUTHORS
TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          KEYWORDS
SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     RESULT 40
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CV064628
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    VERSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        g
                                                                                                                                                                                                                                                                                                                                                                                         HDA1--01-C09.g1 OsHDAC1-overexpressing transgenic rice lambda phage cDNA library I (HDA1) Oryza sativa (japonica cultivar-group) cDNA clone HDA1--01-C09, mRNA sequence.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Oryza sativa (japonica cultivar-group)
Oryza sativa (japonica cultivar-group)
Oryza sativa (japonica cultivar-group)
Bukaryota; Viridiplantae; Streptophyta; Embryophyta; Tracheophyta;
Spermatophyta; Magnoliophyta; Liliopsida; Poales; Poaceae;
Enrhartoideae; Oryzae; Oryzae; Liliopsida; Poales; Poaceae;
Enrhartoideae; Oryzae; Oryzae; Liliopsida; Poales; Poaceae;
Kim,J.S., Jun,K.M., Cheong, P.J., Kim,M.J., Lee,T.H., Shin,Y.C.,
Song,S.I., Kim,J.K., Kim,Y.-K. and Nahm,B.H.
Large-scale Sequencing Analysis of Rice ESTs
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Genomics and Genetics Institute, GreenGene Biotech Inc.; Division of Bioscience and Bioinformatics, MyongJi University Yongin, Kyeonggi, Korea Fal: 82 31 330 6193 Fax: 82 31 321 6355 Email: bhnahm@ggbio.com, bhnahm@bio.myongji.ac.kr.
                                                   Normalization of promic analysis plant Mol. Biol. Rep. 18, 123-132 (2000)

Plant Mol. Biol. Rep. 18, 123-132 (2000)

Contact: Bill Taylor and Industrial Research Organisation

Division of Plant Industry.

CSIRO Plant Industry, GPO Box 1600, Canberra, ACT 2601, Australia

Tel: 61 2 6246 5223

Fax: 61 2 6246 5000

Email: Bill.Taylor@csiro.au

Seq primer: M3 reverse primer

High quality sequence 8top: 28.

Location/Qualifiers
           Normalisation of cereal endosperm EST libraries for structural and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Gaps

    .20
    /organism="Oryza sativa (japonica cultivar-group)"

                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              DB 1; Length 28;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 0.4%; Score 21.4; E 95.7%; Pred. No. 40; tive 0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          5022 TGTAAAAAAAAAAAAAAA 5044
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            /mol_type="mRNA"
/cultivar="Nackdong"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CF305590
CF305590.1 GI:33677351
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Contact: Nahm B.H.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             22; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Query Match
Best Local Similarity
Matches 22; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  RESULT 39
CF305590
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             VERSION
KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           FEATURES
                                                                                             JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  COMMENT
                                                                                                                                                                                                                                                                                                                                                            FEATURES
                                       TITLE
                                                                                                                 COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         g
```

ö

Gaps

5

VERSION KEYWORDS SOURCE ORGANISM

REFERENCE AUTHORS

TITLE

JOURNAL COMMENT

FEATURES

DEFINITION

RESULT 41 CV066488

ò 유 ACCESSION

```
/lab host="E. Coli strain XLI0-Gold, TI-resistant, F-"
//lab host="E. Coli strain XLI0-Gold, TI-resistant, F-"
//clome_lib="Mouse lokb plasmid UUGCIM library"
//note="Vector: PWD42IV; Purified genomic DNA from M.
musculus C57BL/6J (male) was obtained from the Jackson
Laboratory Mouse DNA Resources/documents/dnares/). The DNA
was bylow partice at constant velocity. The sheared DNA
was bylot orifice at constant velocity. The sheared DNA
was blunt end-repaired with T4 DNA polymerase and T4
polymuclectide kinase. Adaptor oligonuclectides were
ligated to the blunt ends in high molar excess. The
adaptored DNA was purified and size-selected for a 9.5 to
10.5 kb range using preparative agarose gfrom a derivative
of pMD42 (gfl | 4732114 | gb | AR129072.1), a copy-number
inducible derivative of plasmid R1. The vector was ligated
with adaptors complementary to the insert adaptors and
purified. The sheared, adaptored mouse DNA was annealed to
adaptored vector DNA, and transformed into
chemically-competent E. coli XLI0-Gold (Stratagene) cells
and selected for ampicillin resistance."
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GSS 20-FEB-2001
Eukaryota, Metazoa, Chordata, Craniata, Vertebrata; Euteleostomi, Mammalia; Eutheria, Rodentia, Sciurognathi; Muridae, Murinae, Mus. 1 (bases 1 to 24)
Dunn, D., Aoyagi, Barber, M., Beacorn, T., Duval, B., Hamil, C., Reilly, M., Longacre, S., Mahmoud, M., Meenen, E., Pedersen, T., Reilly, M., Rose, M., Rose, R., Stokes, R., Tingey, A., von Niederhausern, A. and Wright, D., Weise, R., Dingey, A., von plasmid inserts
Unpublished (2000)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AZ814559 20-FEB-200
2M0082P18F Mouse 10kb plasmid UUGCIM library Mus musculus genomic
clone UUGC2M0082P18 F, genomic survey sequence.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
                                                                                                                                                                                                                                                                                                                                                                                            Contact: Robert B. Weiss
University of Utah Genome Center
University of Utah
University of Utah
University of Utah
Usah
Um. 308, Blomedical Polymers Research Bldg., 20 S. 2030 B., SLC,
84112, USA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Gape
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Query Match

0.4%; Score 19.2; DB 1; Length 24;
Best Local Similarity 87.5%; Pred. No. 49;
Matches 21; Conservative 0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Tel: 801 585 5606
Fax: 801 585 7177
Email: ddundgenetics.utah.edu
Insert Length: 10000 Std Error: 0.00
Plate: 0011 row: E column: 06
Seq primer: CGTTGTAAAACGACGGCCAGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                /organism="Mus musculus"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        /mol_type="genomic DNA"
/strain="C57BL/6J"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    High quality sequence stop: 24. Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                /db_xref="taxon:10090"
/clone="UUGC1M0011E06"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     5043 AAAAAAAAAAAAAAAAAAAAACT 5066
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     24 AAAAAACAAACAAACAAAAACT 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Mus musculus (house mouse)
Mus musculus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AZ814559.1 GI:12984467
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Class: plasmid ends
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                /sex="Male
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AZ814559
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              VERSION
KEYWORDS
SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             RESULT 43
AZ814559/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             DEFINITION
                                                                                    REFERENCE
AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ACCESSION
                                                                                                                                                                                                                                                                                                                                                        JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        FEATURES
                                                                                                                                                                                                                                                                                TITLE
                                                                                                                                                                                                                                                                                                                                                                                                    COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1M0011E06F Mouse 10kb plasmid UUGCIM library Mus musculus genomic clone UUGC1M0011E06 F, genomic survey sequence.
AZ308225 AZ30825.1 GI:10348004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 /lab host="DHOB (Life Technology)" / lab host="DHOB (Life Technology)" / clone lib="Wheat EST endosperm library" / clone lib="Wheat EST endosperm library is ste_z: Not I; mRNA was prepared from endosperm tissues of the wheat cultivar Hartog. CDNA was synthesised from pooled 6, 8, and 10 dpa endosperm using Not I-oligo(dT)18 primer/adapter (Pharmacia Biotech), and then ligated to the Sal I-Not I site of ZipLox vector (Life Technology) after adding a Sal I-Nho I adapter (Stratagene). Constructed by Shahjahan Ali and Bill Taylor."
                                                                                                                                                                                                                                                                                                                CV066488 21-AUG-2004 WNEL4e6 Wheat EST 24-AUG-2004 WNEL4e6 Wheat EST endosperm library Triticum aestivum cDNA clone WNEL4e6 5' similar to Unknown Function, mRNA sequence.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 /db_xref="taxon:4565"
/clone="MNEL4e6"
/tisue_type="endosperm"
/dev_stage="developing endosperm tissue 6, 8, 10 dpa (days
post_anthesia)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Eukaryotta, Viridiplantae; Streptophyta; Embryophyta; Tracheophyta; Spermatophyta; Magnoliophyta; Liliopsida; Poales; Poaceae; Pooleae; Triticeae; Tritice
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 DB 1; Length 23;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 organism="Triticum aestivum"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         0.4%; Score 19.4; Di
95.2%; Pred. No. 47;
tive 0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Tel: 61 2 6246 5223
Fax: 61 2 6246 5200
Email: Bill.Taylor@ceiro.au
Seq primer: M13 reverse primer
High quality sequence stop: 23.
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Triticum aestivum (bread wheat)
Triticum aestivum
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             5047 AAAAAAAAAAAAAAACTC 5067
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         /mol_type="mRNA"
/cultivar="Hartog"
                                                                                    1 AAAAAAAAAAAAAAAATTC 21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AAAAAAAAAAAAAAAATTC 21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Mus musculus (house mouse)
Mus musculus
                                            5047 AAAAAAAAAAAAAAAACTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CV066488.1 GI:51529665
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Query Match
Best Local Similarity 95.2°
Matches 20; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ACCESSION
VERSION
KEYWORDS
SOURCE
ORGANISM
```

ö

DEFINITION AZ308225/c

RESULT 42

셤 ઠે

```
Hall, N., Bowman, S., Lennard, N.J., Doggett, J., Atkin, R.,

Gillingworth, C., Ormond, D., Harris, B., El-Sayed, N., Hou, L.,

Melville, S. E., Rajandream, M.A. and Barrell, B.G.

Direct Submission

AL birect Submission

AL submitted (10-DBC-2000) Trypanosoma brucei genome sequencing

project, Sanger Centre, The Wellcome Trust Genome Campus, Hinxton,

cambridge CB10 1SA, E-mail: barrell@sanger.ac.uk and

nhl@sanger.ac.uk

Constructed at the Institute for Genomic Research (TIGR),

Constructed at the Institute for Genomic Research (TIGR),

Constructed at the Institute for Genomic Research (TIGR),

Rockville, MD. Genomic DNA isolated from a cloned population of

Rockville, MD. Genomic DNA isolated from seconatically sheared

to give a tight size distribution (

4 kb). The v + i method used for the library construction is

described in detail in Smith, H. and Venter, J.C. (Making small

insert libraries for whole genome shotgun sequencing projects.

Barrell, Oxford University Press, 1999).

Barrell, Oxford University Press, 1999).

Bemail: nelsayeddigr.org

petails of T. brucei sequencing at the Sanger Centre are available

at http://www.sanger.ac.uk/Projects/T_brucei/.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 24 bp DNA linear GSS 20-FEB-2001
2M0103J11F Mouse 10kb plasmid UUGCIM library Mus musculus genomic
clone UUGC2M0103J11 F, genomic survey sequence.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Eukaryota, Metazoa, Chordata, Craniata, Vertebrata, Euteleostomi, Bukaryota, Metazoa, Rodentia, Sciurognathi, Muridae, Murinae, Mus. 1 (bases 1 to 24)

Dunn, D., Aoyagi, A., Barber, M., Beacorn, T., Duval, B., Hamil, C., Rallam, H., Longacre, S., Mahmoud, M., Meenen, E., Pedersen, T., Reilly, M., Rose, M., Rose, R., Stokes, R., Tingey, A., von Niederhausern, A. and Wright, D., Weiss, R.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Biomedical Polymers Research Bldg., 20 S. 2030 E., SLC,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ô
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Length 24;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Score 19.2; DB 1;
Pred. No. 49;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Email: ddunn@genetics.utah.edu
Insert Length: 10000 Std Error: 0.00
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1. .24
/organism="Trypanosoma brucei"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Plate: 0103 row: J column: 11
Seg primer: CGTTGTAAAACGACGGCCAGT
Class: plasmid ends
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      plasmid inserts
Unpublished (2000)
Contact: Robert B. Weiss
University of Utah Genome Center
University of Utah
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               /mol_type="genomic DNA"
/strain="TREU927"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            High quality sequence stop: 24.
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 3462 GGAAAATGCTGAATGGGAGAGTAA 3485
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            column: 11
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       /db_xref="taxon:5691"
/clone="250e05"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1 GGAAATGCGGAATCGGAGTGTAA 24
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Mus musculus (house mouse)
Mus musculus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AZ827015.1 GI:12996923
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Query Match 0.4%;
Best Local Similarity 87.5%;
Matches 21; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Tel: 801 585 5606
Fax: 801 585 7177
Email: ddunn@genet
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        USA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AZ827015
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        84112,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        VERSION
KEYWORDS
SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AZ827015/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AUTHORS
                                                                                                                              TITLE
JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       RESULT 45
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  FEATURES
                    REFERENCE
                                            AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    COMMENT
                                                                                                                                                                                                                                                                        COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       /lab_host="E. Coli strain XL10-Gold, T1-resistant, F-"
/lab_host="E. Coli strain XL10-Gold, T1-resistant, F-"
/clone lib="Mouse 10kb plasmid UUGCIM library"
/clone lib="Mouse 10kb plasmid UUGCIM library"
/note="Vector: PWD42IV; Purified genomic DNA from M.
musculus G57BL/6J (male) was obtained from the Jackson
Laboratory Mouse DNA Resources/documents/dnares/). The DNA
was hydrodynamically sheared by repeated passage through a
0.005 inch orifice at constant velocity. The sheared DNA
was hydrodynamically sheared by repeated passage through a
0.005 inch orifica at constant velocity. The sheared DNA
was plunt end-repaired with T4 DNA polymerses and T4
polynuclectide kinase. Adaptor oligonuclectides were
ligated to the blunt ends in high molar excess. The
adaptored DNA was purified and size-selected for a 9.5 to
10.5 kb range using preparative agarose gil
electrophoresis. Vector DNA was prepared from a derivative
of pWD4 (gil 473214) gib AF129072.1), a copy number
inducible derivative of plasmid R1. The vector was ligated
with adaptors complementary to the insert adaptors and
purified. The sheared, adaptored mouses DNA was annealed to
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 GSS 13-DEC-2000
                                                       Dunn, D., Aoyagi, A., Barber, M., Beacorn, T., Duval, B., Hamil, C., Islam, D., Aoyagi, A., Barber, M., Beacorn, T., Pedersen, T., Islam, H., Longacre, S., Mahmoud, M., Meenen, E., Pedersen, T., Reilly, M., Rose, M., Rose, R., Stokes, R., Tingey, A., von Niederhausern, A. and Wright, D., Weiss, R. Mouse whole genome scaffolding with paired end reads from 10kb plasmid inserts

Unpublished (2000)

Contact: Robert B. Weiss
University of Utah Genome Center
University of Utah

Rm. 308, Blomedical Polymers Research Bldg., 20 S. 2030 E., SLC, UT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              paraprored vector DNA, and transformed into chanically-competent E. coli XLIO-Gold (Stratagene) cells and selected for ampicillin resistance."
                    Mummalia, Eutheria, Rodentia, Sciurognathi, Muridae, Murinae, Mus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TA250E05P 24 bp DNA linear GSS 13-DE T. brucei sheared genomic DNA clone 250e05, forward sequence,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Trypanosoma brucei
Trypanosoma brucei
Eukaryota; Euglenozoa; Kinetoplastida; Trypanosomatidae;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           DB 1; Length 24;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                  Tell: 801 585 5606
Fax: 801 585 7177
Email: ddunn@genetics.utah.edu
Insert Length: 10000 Std Error: 0.00
Plate: 0082 row: P column: 18
Seq primer: CGTTGTAAAACGACGGCCAGT
Class: plasmid ends
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ch 0.4%; Score 19.2; D
1 Similarity 87.5%; Pred. No. 49;
21; Conservative 0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    /organism="Mus musculus"
/mol type="genomic DNA"
/grtain="C57BL/6J"
/db xref="taxon:10090"
/clone="UUGC2M0082P18"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           5025 AAAAAAAAAAAAAAAAAAA 5048
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        High quality sequence stop: 24. Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             24 AAAAAAGAAAAGAAAAAAAAA 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  genomic survey sequence. AL483684
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AL483684.1 GI:11849145
GSS.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 sex="Male"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Trypanosoma.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                            Rm. 308, Bi
84112, USA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        RESULT 44
TA250E05P
LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             VERSION
KEYWORDS
                                                                REFERENCE
AUTHORS
                                                                                                                                                                                                                                                                  JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           FEATURES
                                                                                                                                                                                                                                                                                                COMMENT
                                                                                                                                                                                                          TITLE
```

ô

Gaps

5

ò g

```
(http://www.jax.org/resources/documents/dnares/). The DNA was hydrodynamically sheared by repeated passage through a 0.005 inch orifice at constant velocity. The sheared DNA was blunt end-repaired with T4 DNA polymerase and T4 polynucleotide kinase. Adaptor oligonicleotides were ligated to the blunt ends in high molar excess. The adaptored DNA was purified and size-selected for a 9.5 to 10.5 kb range using preparative agarose gal electrophoresis. Vector DNA was prepared from a derivative of puble (4732114|gb|AR129072.1), a copy-number inducible derivative of plasmid R1. The vector was ligated with adaptors complementary to the insert adaptors and purified. The sheared, adaptored mouse DNA was annealed to adaptored vector DNA, and transformed into chemically-competent E. coli XL10-Gold (Stratagene) cells and selected for ampicillin resistance."
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      HDA1--03-002.gl OsHDAC1-overexpressing transgenic rice lambda phage cDNA library I (HDA1) Oryza sativa (japonica cultivar-group) cDNA clone HDA1--03-002, mRNA sequence.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Oryza sativa (japonica cultivar-group)
Oryza sativa (japonica cultivar-group)
Bukaryota; Viridiplantae; Streptophyta; Embryophyta; Tracheophyta;
Spermatophyta; Magnoliophyta; Liliopsida; Poales; Poaceae;
Brhartcideae; Oryzeae; Oryza.
1 (bases 1 to 19)
Kim, J.S., Jun, K.M., Cheong, P.J., Kim, M.J., Lee, T.H., Shin, Y.C., Large-scale Sequencing Analysis of Rice ESTs
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   /clone="HDA1--03-002"
/tissue_type="callus"
/dev_stage="proliferated callus on 2N6 media for 2 weeks"
/lab_host="E.coli SOLR"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Genomics and Genetics Institute, GreenGene Biotech Inc.; Division of Bioscience and Bioinformatics, MyongJi University Yongin, Kyeonggi, Korea Tel: 82 31 330 6193 Fax: 82 31 321 6355
                                                                                                                                                                                         /clone lib="Mouse 10kb plasmid UUGCIM library"
/note="Vector: PWD42nv; Purified genomic DNA from M.
musculus C57BL/6J (male) was obtained from the Jackson
                                                                                                                                                                 /lab_host="E. Coli strain XL10-Gold, T1-resistant, F-"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 /organism="Oryza sativa (japonica cultivar-group)"
/mol_type="mRNA"
/cultivar="Nackdong"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     0.4%; Score 18.8; DB 1; Length 24; 90.9%; Pred. No. 51; zive 0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 bhnahm@bio.myongji.ac.kr
                                                                                                                                                                                                                                                                                     Laboratory Mouse DNA Resource
organism="Mus musculus"
                       mol_type="genomic DNA"
strain="C57BL/6J"
                                                                             /db_xref="taxon:10090"
/clone="UUGC2M0103J11"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              db_xref="taxon:39947"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      5045 AAAAAAAAAAAAAAAAAAACT 5066
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Email: bhnahm@ggbio.com, bhna
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          24 AAAAACAAAAAACAAAAAACT 3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CF306449.1 GI:33678210
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Contact: Nahm B.H.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CF306449
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Best Local
Matches 2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                KEYWORDS
SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ACCESSION
VERSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TITLE
JOURNAL
COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         RESULT 46
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CF306449
LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           FEATURES
```

ð g

```
Unpublished (2000)
Contact: Robert B. Weiss
University of Utah Genome Center
University of Utah
Rm. 308, Biomedical Polymers Research Bldg., 20 S. 2030 E., SLC, UT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 (http://www.jax.org/resources/documents/dnares/). The DNA was hydrodynamically sheared by repeated passage through a 0.005 inch orifice at constant velocity. The sheared DNA was blunt end-repaired with T4 DNA polymerase and T4 polymucleotide kinase. Adaptor oligonucleotides were ligated to the blunt ends in high molar excess. The adaptored DNA was purified and size-selected for a 9.5 to 10.5 kb range using preparative agarose gel electrophoresis. Vector DNA was prepared from a derivative of pWD42 (gi|4732114|gb|AF129072.1), a copy-number
                                                                                                                                                                                                                                                                          ö
/clone lib="OsHDAC1-overexpressing transgenic rice lambda phage cDNA library I (HDA1)"
//note="Vector: pBluescript SK(+); Site l: EcoRI; Site 2: Anot; Callus was treated with ABA(20um) for Ihour. cDNA was inserted into lambda Uni-ZAP XR vector at 5' end with EcoRI and 3' end with XhoI site. mRNA was derived from rice Histone Deacetylase overexpression line."
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Mus musculus
Eukaryota, Metazoa, Chordata, Craniata, Vertebrata, Euteleostomi,
Mammalia, Eutheria, Rodentia, Sciurognathi; Muridae, Murinae, Mus
1 (Dases 1 to 21)
Dunn, D., Aoyagi, A., Barber, M., Beacorn, T., Duval, B., Hamil, C.,
Islam, H., Longacre, S., Mahmoud, M., Meenen, E., Pedersen, T.,
Reilly, M., Rose, M., Rose, M., Stokes, R., Tingey, A., von
Niderhausern, A. and Wright, D., Weiss, R.,
Mouse whole genome scaffolding with paired end reads from 10kb
plasmid inserts
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AZS97932
1M0412D23F Mouse 10kb plasmid UUGCIM library Mus musculus genomic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       musculus C57BL/6J (male) was obtained from the Jackson
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    /lab host="E. Coli strain XL10-Gold, Tl-resistant, F-"/clone lib="Mouse 10kb plasmid UUGCIM library"/note="Vector: PWD42nv, Purified genomic DNA from M.
                                                                                                                                                                                                                                                                          Gape
                                                                                                                                                                                                                                                                          ö
                                                                                                                                                                                                                     Score 18; DB 1; Length 19;
Pred. No. 51;
                                                                                                                                                                                                                                                                          0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Tel: 801 585 5606
Fax: 801 585 7177
Email: ddunn@genetics.utah.edu
Insert Length: 10000 Std Error: 0.00
Plate: 0412 row: D column: 23
Seq primer: CGTTGTAAAACGACGCCAGT
Class: plasmid ends
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Laboratory Mouse DNA Resource
                                                                                                                                                                                                                                                                          Mismatches

    .21
    /organism="Mus musculus"
/mol_type="genomic DNA"
/strain="C57BL/6J"

                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              High quality sequence stop: 21.
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         /db xref="taxon:10090"
/clone="UUGC1M0412D23"
                                                                                                                                                                                               0.4%; Scc...
100.0%; Pred
0; M
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Mus musculus (house mouse)
                                                                                                                                                                                                                                                                                                                            1 GGATCCCCCGGGCTGCAG 18
                                                                                                                                                                                                                                                                                                                                                       2 GGATCCCCCGGGCTGCAG 19
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AZ597932
AZ597932.1 GI:11720122
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              /sex="Male"
                                                                                                                                                                                                                                                                          Conservative
                                                                                                                                                                                                                                              Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              USA
                                                                                                                                                                                                               Query Match
Best Local Simi]
Matches 18; (
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AZ597932/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ACCESSION
VERSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  REFERENCE
AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  KEYWORDS
SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       COMMENT
                                                                                                                                                                                                                                                                                                                                                                             g
                                                                                                                                                                                                                                                                                                                              ð
```

ઠ 셤

```
Unpublished (2004)
Contact: Caldwell RB
GSF - Forschungszentrum, Institut fuer Molekulare Strahlenbiologie
Ingolstaedter Landerr. 1, D-85764 Neuherberg, GERMANY.
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   EST 07-0CT-2004
                                                                                                                                                                                    Trichomonas vaginalis
Eukaryota; Parabasalidea; Trichomonada; Trichomonadida;
Trichomonadidae; Trichomonadinae; Trichomonas.

1 (bases 1 to 19)
Zhou, Y., Shu, W.M., Huang, S.C.C., Huang, K.Y. and Tang, P.
Analysis of Gene Expression Profile in Trichomonas vaginalis by EST
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Archosauria; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Archosauria; Aves; Neognathae; Galliformes; Phasianidae; Phasianinae; Gallus.

1 (bases 1 to 18)

(Caldwell, R. B., Kierzek, A.M., Arakawa, H., Bezzubov, Y., Zaim, J., Fiedler, P., Kutter, S., Blagodatski, A., Kostovska, D., Koter, M., Plachy, J., Carninci, P., Hayashizaki, Y. and Buerstedde, J.M.
Full, length cDNAs from bursal lymphocytes to facilitate gene
  ŝ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 /cell_line="ATCC30236"
/dev stage="ATCC30236"
/lab_host="Xil Blue-WRF""
/clone_lib="Tv30336 PT cDNA Library"
/note="Vector: Lambda ZAP-Express (Stratagene); Site_l:
BCORI; Site_2: XhOI"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AJ725584 1inear EST 07-OCT-AJ725584 rikenl Gallus gallus cDNA clone 2c16r4, mRNA sequence.
TvEST093E02 Tv30236_PT cDNA Library Trichomonas vaginalis cDNA
                                                                                                                                                                                                                                                                                                                                                                                                 \operatorname{Co\bar{n}tact}: Tang, P. Molecular Regulation and Bioinformatics Laboratory, College of
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Changer and Diversity Z59 Wendown Taoyuan 333, Taiwan Z59 Wendwa 1st. Road, Kweishan, Taoyuan 333, Taiwan Tel: +886 3 3283016 EXT5136 Fmax: +886 3 3283031 Fmax: +petang@mail.cgu.edu.tw
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Score 17; DB 1; Length 19;
Pred. No. 57;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 uccation/Qualifiers
1.19
/organism="Trichomonas vaginalis"
/mol_type="mRNA"
/db_xref="taxon:5722"
/cell_line="ATCG30236"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ch 0.3%; Score 17; DB 1 Similarity 100.0%; Pred. No. 57; 17; Conservative 0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    /organism="Gallus gallus"
/mol_type="mRNA"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AJ725584.1 GI:53890998
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Gallus gallus (chicken)
Gallus gallus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        GAATTCGGCACGAGGGG 35
                                                                                                 CO578459.1 GI:50409027
                                                                                                                                                          Trichomonas vaginalis
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  function analysis
Unpublished (2004)
                                                                                                                                                                                                                                                                                                                                                          Sequencing
Unpublished (2003)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Seq primer: T3
                                                  mRNA sequence.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   FORWARD: T7
BACKWARD: T3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Query Match
Best Local S
Matches 17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          19
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                DEFINITION
ACCESSION
VERSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            REFERENCE
                                                                                                                                                                                          ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     RESULT 50
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   KEYWORDS
                       DEFINITION
                                                                                                                                                                                                                                                                                                        AUTHORS
TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AJ725584
                                                                                                    VERSION
KEYWORDS
SOURCE
                                                                                                                                                                                                                                                                                                                                                                                           JOURNAL
                                                                                ACCESSION
                                                                                                                                                                                                                                                                             REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                   COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             /organism="Oryza sativa (japonica cultivar-group)"
/mol type="mRNA"
/mol type="mRNA"
/cultivar="Nackdong"
/db xref="lataxon:39947"
/clone="ABF1-01-B20"
/tissue_type="leaf"
/dev stage="14 days after germination"
/lab_host="E.col: SOLR"
/lab_host="E.col: SOLR"
/clone lib="ABF3-overexpressing transgenic rice lambda phage CDNA library (ABF1)"
/note="Vector: pBluescript SK(+); Site_1: EcoRI; Site_2: Note="Vector: pBluescript SK(+); Site_1: EcoRI; Site_2: Note: Westor after SK(+); Site_1: EcoRI; Site
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             EST 20-JUL-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ö
                          inducible derivative of plasmid R1. The vector was ligated with adaptors complementary to the insert adaptors and purified. The sheared, adaptored mouse DNA was annealed to adaptored vector DNA, and transformed into chemically-competent E. coli XL10-Gold (Stratagene) cells and selected for ampicillin resistance."
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         EST 15-AUG-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Oryza sativa (japonica cultivar-group)
Oryza sativa (japonica cultivar-group)
Eukaryota, Viridiplantae; Streptophyta; Embryophyta; Tracheophyta;
Spermatophyta; Magnoliophyta; Liliopsida; Poales; Poaceae;
Enrhattoideae; Oryzae; Oryza.

1 (bases 1 to 19)
Kim,J.S., Jun,K.M., Cheong,P.J., Kim,M.J., Lee,T.H., Shin,Y.C., Song,S.I., Kim,J.K., Kim,Y.-K. and Nahm,B.H.
Large-scale Sequencing Analysis of Rice ESTs
Unpublished (2003)
Contact: Nahm B.H.
                                                                                                                                                                                                                                                                                      ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Genomics and Genetics Institute, GreenGene Biotech Inc.; Division of Bioscience and Bioinformatics, MyongJi University
Yongin, Kyeongji, Korea
Tel: 82 31 330 6193
Fax: 82 31 321 6355
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ABFI--01-B20.gl ABF3-overexpressing transgenic rice lambda phage cDNA library (ABF1) Oryza sativa (japonica cultivar-group) cDNA clone ABF1--01-B20, mRNA sequence.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Gaps
                                                                                                                                                                                                                                                                                         Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ;
0
                                                                                                                                                                                                                                                                                         ..
0
                                                                                                                                                                                                                              0.4%; Score 17.8; DB 1; Length 21; 90.5%; Pred. No. 54; 2; Indels :ive 0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ch 0.3%; Score 17; DB 1; Length 19; Smilarity 100.0%; Pred. No. 57; 17; Conservative 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Email: bhnahm@ggbio.com, bhnahm@bio.myongji.ac.kr.
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         mRNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               mRNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           19 bp
                                                                                                                                                                                                                                                                                                                                                     5025 AAAAAAAAAAAAAAAAA 5045
                                                                                                                                                                                                                                                                                                                                                                                                       21 AAAAAAAAAAAAAAA 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GGATCCCCCGGGCTGCA 19
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1 GGATCCCCCGGGCTGCA 17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CF303019.1 GI:33674780
                                                                                                                                                                                                                                                                                                  Conservative
                                                                                                                                                                                                                                                Query Match
Best Local Similarity
Matches 19; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CO578459
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Query Match
Best Local S
Matches 17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         RESULT 49
CO578459
LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ACCESSION
VERSION
KEYWORDS
SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TITLE
JOURNAL
COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      RESULT 48
CF303019
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         QQ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ઠે
```

```
Roslin Institute
Roslin, Midlothian, EH25 9PS, UNITED KINGDOM
Single pass sequencing. Bases called and trimmed with phred
Single pass sequencing. Bases called and trimmed with phred
V0.020425.c. Vector identified by cross match with the -minscore 20
and -minmatch 12 options. Vector: pBluescriptin (SK+) R. Site 1:
ECORI R. Site 2: Not1 5' Seq primer M13F Description: Normalised
library constructed from Bovine Uterus tissue. Clones available
from UK Centre for Functional Genomics in Farm Animals, Roslin
Institite, Roslin, Midlothian, UK, EH25 9PS, www.arkgenomics.org.
                                                                   Anderson, S. I., Finlayson, H. A. and Archibald, A. L.
Anderson, S. I., Finlayson, H. A. and Archibald, A. L.
Development of coMA and EST resources for studying reproduction and embryo development in pigs and cattle
Unpublished (2004)
Gencact: Anderson SI
Genomics and Bioinformatics
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  I6 bp mRNA linear BST 01-OCT-2004
DKFZp46BE2231_r1 468 (synonym: phrt1) Pongo pygmaeus cDNA clone
CR786853
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Ingolstaedter Landstr.1, D-85764 Neuherberg, Germany
This is the 5' sequence of the clone insert. Clone from S. Wiemann,
Molecular Genome Analysis, German Cancer Research Center (DKFZ);
Email s.wiemann@Afz-heidelberg.de; mforschung GmbH in Berlin,
Germany. Please contact RZPD for ordering:
http://www.rzpd.de/cgi-bin/products/cl.cgi?CloneID=DKFZp468E2231
Further information about the clone and the sequencing project is
available at http://mips.gsf.de/projects/cdns/.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          /tissue type="uterus"
/clone lib="KN224"
/note="Vector: pBluescriptII(SK+); Site 1: EcoRI; Site_2:
NotI; Single pass sequencing. Normalised library
constructed from Bovine Uterus tissue."
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Eukaryota: Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Pongo.

1 (Dases 1 to 16)

Koehrer, K., Beyer, A., Mewes, H.W., Weil, B., Amid, C., Osanger, A., Pobo, G., Han, M. and Wiemann, S.

Pobo, G., Han, M. and Wiemann, S.

Unpublished (2004)

Contact: MIPS
      Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Cetartiodactyla; Ruminantia; Pecora; Bovidae;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Score 16; DB 1; Length 16;
Pred. No. 60;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    0.3%; Scott 100.0%; Pred. No. cott. 0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         /organism="Pongo pygmaeus"
/mol_type="mRNA"
/db_xref="taxon:9600"
/clone="DKFZp468E2231"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              /mol_type="mRNA"
/db_xref="taxon:9913"
/clone="KN227-028 N23"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           /organism="Bos taurus"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Pongo pygmaeus (orangutan)
Pongo pygmaeus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CR786853.1 GI:53705850
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            3 ATCCCCCGGGCTGCAG 18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    16 ATCCCCGGGCTGCAG 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 16; Conservative
                              Mammalia; Eut
Bovinae; Bos.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           MIPS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Query Match
Best Local &
                                                                                                                                                                                                                                                                                                                                                                                                                                                         source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ORGANISM
                                                                   REFERENCE
AUTHORS
TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               JOURNAL
COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       RESULT 53
CR786853
                                                                                                                                                          JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        VERSION
KEYWORDS
SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                               FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               FEATURES
                                                                                                                                                                                    COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    g
                                                                                                                                                                                                                                                                                                                                                                                        CR786637

18 bp mRNA linear EST 01-OCT-2004

DKF2p468J2331_r1 468 (synonym: phrt1) Pongo pygmaeus cDNA clone
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Ingolstaedter Landstr.1, D-85764 Neuherberg, Germany
This is the 5' sequence of the clone insert. Clone from S. Wiemann,
Molecular Genome Analysis, German Cancer Research Center (DKFZ);
German Cancer Research Center (DKFZ);
Germany. Please contact RZPD for ordering:
http://www.rzpd.de/cgi.bin/products/cl.cgi?CloneID=DKFZp468J2331
Further information about the clone and the sequencing project is
available at http://mips.gsf.de/projects/cdna/.
                                                                                                                                                                                                      ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AJ679356 11 29-JUN-2004 AJ679356 KN224 Bos taurus cDNA clone KN227-028 N23, mRNA sequence. AJ679356
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     /clone_lib="468 (synonym: phrtl)"
/note="Vector: pSportl_Sfi; Site_l: SfilA; Site_2: SfilB"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Pongo pygmaeus
Bukaryota, Metazoa, Chordata, Craniata, Vertebrata, Euteleostomi,
Mammalia, Eutheria, Primates, Catarrhini, Hominidae, Pongo.
1 (bases 1 to 18)
Koehrer, K., Beyer, A., Mewes, H.W., Well, B., Amid, C., Osanger, A.,
Pongo pygmaeus mRNA (Koehrer, K., Beyer, A., Mewes, H.W., et al.)
Unpublished (2004)
                                                                                                                                                                                                      Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Gaps
                                                                                                                                                                                                      ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ..
0
                                                                                                                                                          Length 18;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             DB 1; Length 18;
                                                                                                                                                                                                      Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1; Indels
/db_xref="taxon:9031"
/clone="2cl6r4"
/cell_type="bursal lymphocyte"
/dev_stage="2-3 weeks old"
/clone libe="riken1"
/note="CB inbred strain"
                                                                                                                                                          DB 1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Score 16.4; DB
Pred. No. 60;
0; Mismatches
                                                                                                                                                        Score 16.4; DE
Pred. No. 60;
0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 /organism="Pongo pygmaeus"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      /mol_type="mRNA"
/db_xref="taxon:9600"
/clone="DKFZp468J2331"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         tissue_type="heart"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           /dev_stage="adult"
/lab_host="DH10B"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Pongo pygmaeus (orangutan)
                                                                                                                                                                                                                                           5024 TAAAAAAAAAAAAA 5041
| ||||||||||||||
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                5025 AAAAAAAAAAAAAA 5042
                                                                                                                                                                                                                                                                                         1 TCAAAAAAAAAAAAA 18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1 AAAAAAAAAAAAAAATA 18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AJ679356.1 GI:49411943
EST.
Bos taurus (cow)
Bos taurus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CR786637.1 GI:53705634
                                                                                                                                                          0.3%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               94.48;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Query Match
Best Local Similarity 94.4
Matches 17; Conservative
                                                                                                                                                                                                      Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Contact: MIPS
                                                                                                                                                                               Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CR786637
                                                                                                                                                                                                  17;
                                                                                                                                                          Query Match
Best Local S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      DEFINITION
ACCESSION
VERSION
KEYWORDS
SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            RESULT 52
AJ679356/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            VERSION
KEYWORDS
SOURCE
ORGANISM
                                                                                                                                                                                                    Matches
                                                                                                                                                                                                                                                                                                                                                                                                                           DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TITLE
JOURNAL
COMMENT
                                                                                                                                                                                                                                                                                                                                                          RESULT 51
CR786637
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        LOCUS
                                                                                                                                                                                                                                                                                       g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ò
```

Gape

ö

0; Indels

ð 셤

```
Yerranyment chermophina

Terranyment chermophina

Eukaryota; Alveolata; Ciliophora; Oligohymenophorea;

Hymenostomatida; Tetrahymenina; Tetrahymenidae; Tetrahymena.

Hymenostomatida; Tetrahymenina; Tetrahymenidae; Tetrahymena.

Hymenostomatida; Tetrahymena.

Turkewitz,A.P., Karrer,K.M., Jahn,C., Orias,E., Kirk,K.E.,

Frankel,J. and Klobutcher,L.

Frankel,J. and Klobutcher,L.

Est from Tetrahymena thermophila, strain CU428.1, growing cells

Contact: Turkewitz AP

Molecular Genetics and Cell Biology

University of Chicago

920 E. 58th Street, Chicago, IL 60637, USA

Tel: 773 702 3172

Fax: 773 702 3172

Email: apturkew@midway.uchicago.edu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 /mol_type="mRNA"
/strain="CU428.1"
/db_xref="taxon:5911"
/db_xref="taxon:5911"
/clone lib="Chilcoat/Turkewitz cDNA (large fraction)"
/note="Vector: BlueScript2 SK+; Details on library
preparation can be found in Chilcoat and Turkewitz (2001)
Proc. Natl. Acad. Sci USA, 98: 8709-8713."
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           EST 17-JAN-2002
                                                                                                                                                                                                                                                                                                                                                                                                                /db_xref="taxon:5911"
/db_xref="taxon:5911"
/clone lib="Chilcoat/Turkewitz cDNA (large fraction)"
/note="vector: BlueScript2 SK+; Details on library
preparation can be found in Chilcoat and Turkewitz (2001)
proc. Natl. Acad. Sci USA, 98: 8709-8713."
Turkewitz, A.P., Karrer, K.M., Jahn, C., Orias, E., Kirk, K.E., Frankel, J. and Klobutcher, L.

EST from Tetrahymena thermophila, strain CU428.1, growing cells EST from Tetrahymena thermophila, strain CU428.1, growing cells Contact: Turkewitz AP

Molecular Genetics and Cell Biology
University of Chicago
920 E. SEH Street, Chicago, IL 60637, USA
Tel: 773 702 3172
Fex: 773 702 3172
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         BM399768
5009-0-61-C01.t.1 Chilcoat/Turkewitz cDNA (large fraction)
Tetrahymena thermophila cDNA, mRNA sequence.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          0.3%; Score 16; DB 1; Length 17; 100.0%; Pred. No. 62; tive 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Query Match 0.3%; Score 16; DB 1; Length 17; Best Local Similarity 100.0%; Pred. No. 62; Matches 16; Conservative 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    organism="Tetrahymena thermophila"

    17
        forganism="Tetrahymena thermophila"
/mol type="mRNA"
/strain="CU428.1"

                                                                                                                                                                                                                                        Email: apturkew@midway.uchicago.edu
Seq primer: T3.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Location/Qualifiers
                                                                                                                                                                                                                                                                                               Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  5070 GGGGGGCCCGGTACC 5085
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              BM399768.1 GI:18199821
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Tetrahymena thermophila
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       5070 GGGGGGCCCGGTACC 5085
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1 GGGGGGCCCGGTACC 16
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      16; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Seq primer: T3.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Matches
                                                                                                                                                                                                                                                                                                                                    source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TITLE
JOURNAL
COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                RESULT 56
BM399768
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AUTHORS
                                                                                           JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      VERSION
KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         FEATURES
                             AUTHORS
                                                                                                                                                                                                                                                                                                           FEATURES
                                                                       TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Tetrahymena thermophila
Tetrahymena thermophila
Tetrahymena thermophila
Tetrahymena thermophila
Eukaryota; Alveolata; Ciliophora; Oligohymenophorea;
Bukaryota; Alveolata; Ciliophora; Oligohymenophorea;
Hymenostomatida; Tetrahymenina; Tetrahymenidae; Tetrahymena.
Hymenostomatida; Tetrahymena;
Turkewitz,A.P., Karrer,K.M., Jahn,C., Orias,E., Kirk,K.E.,
Frankel,J. and Klobuccher,L.
Ery from Tetrahymena thermophila, strain CU428.1, growing cells
EST from Tetrahymena thermophila, strain CU428.1, growing cells
Unpublished (2002)
Contact: Turkewitz AP
Molecular Genetics and Cell Biology
University of Chicago
920 E. 58th Street, Chicago, IL 60637, USA
Tel: 773 702 4374
Fax: 773 702 4374
Fax: 773 702 3172
Email: apturkew@midway.uchicago.edu
Seq primer: T3.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             EST 17-JAN-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ö
                                                                                                                                                                                                                                                                                                                                                                                                                                  EST 17-JAN-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                /db.cxef="caxon:5911"
/db.cxef="caxon:5911"
/clone lib="Chilcoat/Turkewitz cDNA (large fraction)"
/note="Vector: BlueScript2 SK+; Details on library
preparation can be found in Chilcoat and Turkewitz (2001)
Proc. Natl. Acad. Sci USA, 98: 8709-8713."
                                                                                                                                                                                                                    ö
                                                             /dev_stage="adult"
/lab_host="DH10B"
/clome_lib="468 (synonym: phrt1)"
/note="Vector: pSport1_Sfi; Site_1: SfillA; Site_2: SfilB"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Tetrahymena thermophila
Tetrahymena thermophila
Eukaryota; Alveolata; Ciliophora; Oligohymenophorea;
Hymenostomatida; Tetrahymenina; Tetrahymenidae; Tetrahymena.
1 (bases 1 to 17)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           BM398024 1.0.2 Chilcoat/Turkewitz cDNA (large fraction) Tetrahymena thermophila CDNA, mRNA sequence.
                                                                                                                                                                                                                                                                                                                                                                                                                               BM398023 17 bp mRNA linear EST 1'5009-0-4-E01.t.1 Chilcoat/Turkewitz cDNA (large fraction)
Tetrahymena thermophila cDNA, mRNA sequence.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ;
                                                                                                                                                                                                                         .
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      0.3%; Score 16; DB 1; Length 17;
100.0%; Pred. No. 62;
ive 0; Mismatches 0; Indels
                                                                                                                                                                     0.3%; Score 16; DB 1; Length 16; 100.0%; Pred. No. 60; ative 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         /organism="Tetrahymena thermophila"
/mol_type="mRNA"
/strain="CU428.1"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Location/Qualifiers
                                       /tissue_type="heart"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                BM398024.1 GI:18198077
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         5070 GGGGGGCCCGGTACC 5085
                                                                                                                                                                                                                                                                             5025 AAAAAAAAAAAAAA 5040
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   BM398023
BM398023.1 GI:18198076
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       16; Conservative
                                                                                                                                                                                    Query Match 0.3;
Best Local Similarity 100.0
Matches 16; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Query Match
Best Local Similarity
Matches 16; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  BM39802
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          VERSION
KEYWORDS
SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            VERSION
KEYWORDS
SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    REFERENCE
AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TITLE
JOURNAL
COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  RESULT 55
BM398024
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                       RESULT 54
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                             BM398023
```

ö

```
Large-scale Sequencing Analysis of Rice ESTs Unpublished (2003) Contact: Nahm B.H. Contact: Nahm B.H. Genomics and Genetics Institute, GreenGene Biotech Inc.; Division of Bioscience and Bioinformatics, Myongdl University Yongin, Kyeonggi, Korea Tel: 82 31 330 6193 Fax: 82 31 321 6355 Email: bhnahmanchi
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 /tissue type="leaf" / dev stage="14 days after germination" / dev stage="14 days after germination" / lab host="E.coli SOLR" / lab host="E.coli SOLR" / clone lib="AtJMT-overexpressing transgenic rice lambda phage cDNA library (JMT1)" / note="Vector: pBluescript SK(+); Site 1: EcoRI; Site 2: Note="Vector: pBluescript SK(+); Site 1: EcoRI; Site 2: Ano; cDNA was inserted into lambda Uni-Zap KR vector at 5 end with EcoRI and 3' end with XhoI site. mRNA was prepared from Arabidopsis Jasmoinate Carboxyl methyltransferase overexpression line."
                                                                                                                                                                                                                                                                                                                                                            /organism="Oryza sativa (japonica cultivar-group)"
/mol_type="mRNA"
/cultivar="Nackdong"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       0.3%; Score 16; DB 1; Length 20;
100.0%; Pred. No. 65;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    100.0%; Prec. ...
.... 0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                       /db_xref="taxon:39947"
/clone="JMT1--06-H19"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Search completed: August 18, 2005, 09:13:51
Job time : 6 secs
                                                                                                                                                                                                                                                                                                                Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1 GGATCCCCCGGGCTGC 16
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         s ecarececececeree 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         16; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Query Match
                                                                                                                                                                                                                                                                                                                                            source
                                                                                   TITLE
JOURNAL
ĆOMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Best Loc
Matches
                                                                                                                                                                                                                                                                                                                     FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ద
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           /db_xref="taxon:39947"
/clone="HDA1--06-024"
/tisue=type="callus"
/tisue=type="callus"
/dev stage="proliferated callus on 2N6 media for 2 weeks"
/lab_host="E.coli SOLR"
/lab_host="E.coli SOLR"
/lab_host="Coli SOLR"
/lab_host="Coli SOLR"
/clone lib="OSHDAC1-overexpressing transgenic rice lambda phage cDNA library I (HDA1)"
/note="Vector: pBluescript SK(+); Site_1: EcoRI; Site_2:
XhoI; Callus was treated with ABA(20um) for lhour. cDNA was inserted into lambda Uni-ZAP XR vector at 5' end with EcoRI and 3' end with XhoI site. mRNA was derived from rice Histone Deacetylase overexpression line."
                                                                                                                                                                                                HDA1--06-024.gl OSHDAC1-overexpressing transgenic rice lambda phage cDNA library I (HDA1) Oryza sativa (japonica cultivar-group) cDNA clone HDA1--06-024, mRNA sequence.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CF326591 20 bp mRNA linear EST 18-AUG-2003 UMT1--06-H19.gl AtJMT-overexpressing transgenic rice lambda phage cDNA library (JMT1) Oryza sativa (japonica cultivar-group) cDNA Clone JMT1--06-H19, mRNA sequence.
                                                                                                                                                                                                                                                                                                                                                                                   Oryza sativa (japonica cultivar-group)
Oryza sativa (japonica cultivar-group)
Bukaryota, Vizidiplantae; Streptophyta; Embryophyta; Tracheophyta;
Bhrhartoideae; Oryzae; Liliopsida; Poales; Poaceae;
Ehrhartoideae; Oryzae; Oryza.

I (bases 1 to 20)
Kim, V.S., Unn, K.M., Cheong, P.J., Kim, M.J., Lee, T.H., Shin, Y.C.,
Song, S.I., Kim, J.K., Kim, Y.-K. and Nahm B.H.
Large-scale Sequencing Analysis of Rice ESTs
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Oryza sativa (japonica cultivar-group)
Oryza sativa (japonica cultivar-group)
Eukaryota; Viridiplantae; Streptophyta; Embryophyta; Tracheophyta;
Spermatophyta; Magnoliophyta; Liliopsida; Poales; Poaceae;
Ehrhartoideae; Oryzaee; Oryza.

1 (bases 1 to 20)
Kim,J.S., Jun,K.M., Cheong,P.J., Kim,M.J., Lee,T.H., Shin,Y.C.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Contact: Nahm B.H.
Genomics and Genetics Institute, GreenGene Biotech Inc.; Division of Bioscience and Bioinformatics, MyongJi University
Yonglin, Kyeonggi, Korea
Tel: 82 31 330 6193
Fax: 82 31 321 6355
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             /organism="Oryza sativa (japonica cultivar-group)"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    .
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Email: bhnahm@ggbio.com, bhnahm@bio.myongji.ac.kr.
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   DB 1; Length 20;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             0.3%; Score 16; DB
100.0%; Pred. No. 65;
1ve 0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 /mol_type="mRNA"
/cultivar="Nackdong"
                                                                                                                                                                                                                                                                                                                                          CF307519.1 GI:33679280
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CF326591.1 GI:33801439
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       100.08;
                                                         1 GGATCCCCCGGGCTGC 16
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               GGATCCCCGGGCTGC 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Query Match
Best Local Similarity 100.(
Matches 16; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   VERSION
KEYWORDS
SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                         SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              LOCUS
DEFINITION
                                                                                                                                                                                                                                    DEFINITION
                                                                                                                                                                                                                                                                                                             ACCESSION
VERSION
KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TITLE
JOURNAL
COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                REFERENCE
AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  REFERENCE
AUTHORS
                                                                                                                                                              RESULT 57
CF307519
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             RESULT 58
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CF326591
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           FEATURES
                                                                                     셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ठे
```

ô

Gaps

ö

0; Indels

'n

THIS PAGE BLANK (USPTO)

ACCESSION: AR541361 ACCESSION: AR562157 ACCESSION: AR239256 ACCESSION: AX279058 ACCESSION: AX279058	ACCESSION: AR068314 ACCESSION: AX815621 ACCESSION: AX815622 ACCESSION: AK52847 ACCESSION: AJ000777	ACCESSION: ARS 62156 ACCESSION: ARS 62156 ACCESSION: ARO 72061 ACCESSION: AX130055 ACCESSION: AX498248 ACCESSION: AX69856	ACCESSION: AR164645 ACCESSION: AR168088 ACCESSION: AR212188 ACCESSION: AR216040	ACCESSION: AR337628 ACCESION: AR473351 ACCESSION: AR492475 ACCESSION: AR533532 ACCESSION: ARC24174	ACCESSION: IS4907 ACCESSION: IS4907 ACCESSION: AR370189 ACCESSION: AR136554	ACCESSION: E60050 ACCESSION: A4482351 ACCESSION: C0801.070 ACCESSION: AR120179	ACCESSION: AR126177 ACCESSION: AR171993 ACCESSION: AR251620 ACCESSION: BD063767	ACCESSION: AX83'871 ACCESSION: AR179243 ACCESSION: BD078905 ACCESSION: A95627	ACCESSION:AR215/42 ACCESSION:AR429226 ACCESSION:BD091431 ACCESSION:AX247921	ACCESSION: CQ881300 ACCESSION: AX937073 ACCESSION: AX951931 ACCESSION: ABF61628	ACCESSION: ARS61693 ACCESSION: AX215201 ACCESSION: AX757347 ACCESSION: AX762159	ACCESSION. AR17949 ACCESSION. AR173949 ACCESSION. AR173955 ACCESSION. BD271297 ACCESSION. AR17403	ACCESSION: 195654 ACCESSION: AR292422 ACCESSION: AR001320 ACCESSION: AR067500 ACCESSION: AR06780	ACCESSION: ARNOVOSO ACCESSION: AR118034 ACCESSION: AR118034 ACCESSION: AR144920 ACCESSION: AR145921
19 0.4 19 1 8.8 0.4 25 1 8.8 0.4 25 1 8.8 0.4 25 1	0.4 0.4 0.4 0.4 0.4 0.4 0.4 0.4 0.4 0.4	18 0.4 20 1 AR562156 18 0.4 20 1 AR562158 17.4 0.3 19 1 AX130055 17.4 0.3 21 1 AX498248 17 0.3 17 1 AR06856 17 0.3 17 1 AR06856	0.3	00.3 17.1 17.1 17.1 17.1 17.1 17.1 17.1 17	17 0.3 20 1 17 0.3 20 1 17 0.3 20 1 6.8 0.3 20 1	6.8 0.3 20 1 6.8 0.3 20 1 6.8 0.3 21 1 6.8 0.3 22 1	0.0 0.3 0.3 0.3 0.3 0.3 0.3 0.3 0.3 0.3	6.4 0.3 18 1 6.4 0.3 19 1 6.4 0.3 19 1 6.4 0.3 20 1	6.4 0.3 20 1 6.4 0.3 20 1 6.4 0.3 20 1 6.4 0.3 21 1	6.2 0.3 21 1 6.2 0.3 21 1 6.2 0.3 21 1 16 0.3 16 1	0.3 16 1	0.33 221 1 1 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	000000000000000000000000000000000000000	5.8 0.3 20 1 25.
0 0 0 0 0 4 4 6 6 6 6 6 6 6 6 6 6 6 6 6		00 0 4444444				49 80 80 60 79	69 69 70 71 72	7.3 7.5 7.5 7.5 7.5	7,77 0,09 0,09	0 0 0 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	9 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	44444
GenCore v	<pre>search, using sw model it 18, 2005, 08:32:01 ; Search time 9 Seconds (without alignments) 3.614 Million cell updates/sec</pre>	-10-667-022-4 85 ggatcccccgggctgcaggatcgagggggggcccggtacc 5085 BNTITY NUC	3198 residue fying chosen	Match 0%	maximum macch 100* Listing first 150 summaries fetch4rge.seg:*	number of results predicted by chance to have a an or equal to the score of the result being printed, y analysis of the total score distribution.	SUMMARIES Length DB ID Description	1 CQ540998 ACCESSIOI CQ540933 ACCESSIOI CQ878333 ACCESSIOI CQ878334 ACCESSIOI	1 ARCESSIO 1 155635 ACCESSIO 1 ARS41545 ACCESSIO 1 ARS41546 ACCESSIO 1 ARCESSIO	1 A63565 ACCESSION 1 A63574 ACCESSION 1 ARS59409 ACCESSION 1 E13974 ACCESSION	1 B14908 ACCESSION 1 B64706 ACCESSION 1 AR559758 ACCESSION 1 AR559759 ACCESSION 1 AR5299 ACCESSION 1 AR5299 ACCESSION 1 AR5299 ACCESSION	1 BAS53682 ACCESSION 1 AR553682 ACCESSION 1 AR559411 ACCESSION 1 AR561993 ACCESSION 1 AR561164 ACCESSION	20 1 AX085176 ACCESSION:AX085176 20 1 AX085173 ACCESSION:AX085173 21 1 AR222119 ACCESSION:AX222119 24 1 CQ855140 ACCESSION:CQ855140 24 1 AX103868 ACCESSION:AX103868	1 AA546321 ACCESSION 1 AR541350 ACCESSION 1 AR541351 ACCESSION 1 AR541352 ACCESSION 1 AR541353 ACCESSION
Cop	OM nucleic - nucleic sear Run on: August 18	Title: US-10-667-022-Perfect score: 5085 Sequence: 1 ggatccccgggg Scoring table: IDENTITY_NUC	Searched: 150 segs, Total number of hits sati	um DB seq length um DB seq length processing: Mini	maximum Listing Database : fetch4rg	Pred. No. is the numbescore greater than or and is derived by ana	% Query re Match	60 1. 40.6 0.	4 33.2 2 30 30 50 50 50 50 50 50 50 50 50 50 50 50 50	27 0. 27 0. 22.6 0. 21 0.	22222	200000 200000	23 24 25 25 26 27 20 20 20 20 20 20 20 20 20 20 20 20 20	10 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0

```
Best Local Similarity 100.
Matches 60; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                              source
                                                                                                                                                                                                                                                                                                                              RESULT 3
CQ878334/c
LOCUS
DEFINITION
                                                                                                                                                                                                source
                                                                                                                                                                                                                                                                                                                                                                                             ORGANISM
                                                                                       DEFINITION
ACCESSION
VERSION
KEYWORDS
SOURCE
                                                                                                                                ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                             REFERENCE
AUTHORS
                                                                                                                                                                TITLE
JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                     JOURNAL
                                                                                                                                                                                                                                                                                                                                                              ACCESSION
                                                                                                                                                       AUTHORS
                                                                                                                                                                                                                                                                                                                                                                     VERSION
KEYWORDS
                                                                                                                                                REFERENCE
                                                                RESULT 2
CQ878333
                                                                                                                                                                                                                                                                                                                                                                                                                                                      FEATURES
                                                                                                                                                                                        FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                              TITLE
                                                                                                                                                                                                                                                                                                                                                                                      SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   셤
                                                                                                                                                                                                                                                                                                      엄
                                         g
                          8
                                                                                                                                                                                                                                                                                                                                                                                                                        PAT 30-JAN-2004
                                                                                                                                                                                                                                ACCESSION: AX759799
ACCESSION: AX378533
ACCESSION: AX765627
ACCESSION: BD124158
ACCESSION: A73298
ACCESSION: AR061035
                                                                                                                                                        ACCESSION: AX754893
ACCESSION: BD079122
ACCESSION: BD079124
ACCESSION: AX215520
ACCESSION: AX215521
ACCESSION: AX724695
ACCESSION: AX77649
ACCESSION: AX77649
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Bukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo
                                                                                                                                                                                                                                                                                ACCESSION: AR161668
ACCESSION: BD228503
ACCESSION: AR231312
                                                                                                                                                                                                                                                                                                                 ACCESSION: AR308288
ACCESSION: AR359728
                                                                                                                                                                                                                                                                                                                                ACCESSION: AX010862
                                                                                                                                                                                                                                                                                                                                                ACCESSION: AX699215
ACCESSION: BD009330
                                                                                                                                                                                                                                                                                                         ACCESSION: AR294465
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Shoshan, A., Wasserman, A., Mintz, E., Mintz, L. and Faigler, S. Oligonuclectide library for detecting rna transcripts and splice variants that populate a transcriptome Patent: WO 0210449-A 10633 07-FEB-2002;
                          ACCESSION: 141154
ACCESSION: AR205352
ACCESSION: AR215823
                                                   ACCESSION: AR241587
ACCESSION: AR254543
                                                                                                 ACCESSION: AX184029
ACCESSION: AR296992
                                                                                                                                          ACCESSION: AX404548
                                                                                                                                  ACCESSION: AX404547
     ACCESSION:
                                                                                                                                                                                                                                                                                                                                                                                                                         linear
                                                                                                                                                                                                                                                                                                                                                                                                                        CQ540998 60 bp DN Sequence 10633 from Patent WO0210449.

    .60
    /organism="Homo sapiens"
/mol_type="unassigned DNA"
/db_xref="taxon:9606"

                                                                                                                                                                                                                                                                                                                                                                                 ALIGNMENTS
                                                                                                                    AX140444
AX140446
AX404547
AX404548
AX642667
AX754893
BD079122
BD079124
                                                                                                                                                                                   AX214621
AX215520
AX215521
                                                                                                                                                                                                          AX724695
AX727643
AX756789
AX759799
AX378533
AX765627
BD124158
                                                                                                                                                                                                                                                                  A73298
AR061035
AR161668
BD228503
                                                                                                                                                                                                                                                                                                   AR231312
AR294465
AR308288
AR359728
AX010862
AX029045
                                                                                     AR473568
AR474038
AX184029
AR296992
      BD211609
CQ762074
CQ763022
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Compugen Inc. (US)
Location/Qualifiers
                                                             AR254543
                                                                                                                                                                                                                                                                                                                                                                                                                                                CQ540998.1 GI:41507262
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Homo sapiens (human)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Homo sapiens
                                                                                      CQ540998
                       ACCESSION
VERSION
KEYWORDS
SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           source
                                                                                                                                                                                                                                                                                                                                                                                                                                   DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  REFERENCE
AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                            RESULT 1
CQ540998
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TITLE
                                                                                                                                                                                                                                                            138
138
141
142
144
144
145
                                                                                                      υ
                                                                                                                                                                                                                                                              υυυυ
```

```
ö
                                                4349
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   PAT 04-OCT-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ö
              ö
                                                                                                                                                                     PAT 04-OCT-2004
                                                                                9
                                              4290 CGTCCATGGTATCTACTGTAGTCCTGCAGATGGAAATCCTATCCTACTAACAGCTGGCTC
                                                                  1. .50
/organism="synthetic construct"
/mol type="unassigned DNA"
/db xref="taxon:32630"
/noce="Description of Artificial Sequence: Synthetic
nucleotide sequence"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                1. .50
/organism="synthetic construct"
/mol_type="unassigned DNA"
/db_xref="taxon:32630"
/note="Description of Artificial Sequence: Synthetic
nucleotide sequence"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Gaps
                Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ö
                 ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Query Match 0.8%; Score 40.6; DB 1; Length 50; Best Local Similarity 91.5%; Pred. No. 0.51; Matches 43; Conservative 0; Mismatches 4; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                47
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Length 50;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Regulation of rna stability
Patent: WO 2004081179-A 36 23-SEP-2004;
The Government of the United States of America (US)
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                          Lai,W.S. and Blackshear,P.J.
Regulation of rna stability
Patent: WO 2004081179-A 35 23-SEP-2004;
The Government of the United States of America (US)
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               4; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  linear
                                                                                                                                                                      linear
                 Indels
100.0%; Pred. No. 0.0069;
iive 0; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             0.8%; Score 40.6; DB 1;
91.5%; Pred. No. 0.51;
tive 0; Mismatches 4;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Sequence 36 from Patent WO2004081179.
CQ878334
                                                                                                                                                               Sequence 35 from Patent WO2004081179.
CQ878333
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       other sequences; artificial sequences.
                                                                                                                                                                                                                                                                             synthetic construct
other sequences; artificial sequences.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Lai, W.S. and Blackshear, P.J.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CQ878334.1 GI:53790900
                                                                                                                                                                                                                         CQ878333.1 GI:53790899
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            synthetic construct
synthetic construct
                                                                                                                                                                                                                                                             synthetic construct
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       43; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Query Match
Best Local Similarity
Matches 43; Conservat
```

RESULT

1.2%; Score 60; DB 1; Length 60;

Query Match

Gaps

AR014711

REFERENCE AUTHORS

JOURNAL

TITLE

FEATURES

```
PAT 08-OCT-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Scaggiante, B. and Quadrifoglio, F. A CLASS OF OLIGONUCLEOTIDES, THERAPEUTICALLY USEFUL AS ANTITUMOURAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                PAT 12-MAR-1998
                                                                                                            ô
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ô
                                                                                                                                                                                                                                                                                                                                                                                  1 (bases 1 to 30)
Tokunaga, T., Ishiguro, T. and Horie, R.
Fluorescent dye and method of measuring nucleic acid
Patent: 18 6743588-A 2 01-UJN-2004;
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Length 35;
                                                                           Score 30; DB 1; Length 30;
Pred. No. 4.8;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                linear
                                                                                                           0; Indels
                                                                                                                                                                                                                                                         linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  DB 1; Length 30;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     4
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     5032 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ï
                                                                                                                                                                                                                                                         DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Other publication IT MI952539 19970604
Other publication AU 1175497 19970627.
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    0.5%; Score 27.6; DB
88.2%; Pred. No. 8.4;
tive 0; Mismatches
                                                                         Query Match 0.6%; Score 30; DB 1;
Best Local Similarity 100.0%; Pred. No. 4.8;
Matches 30; Conservative 0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Query Match 0.6%; Score 30; DB 1;
Best Local Similarity 100.0%; Pred. No. 4.8;
Matches 30; Conservative 0; Mismatches
                                                                                                                                          5025 AAAAAAAAAAAAAAAAAAAAAAAAAAA 5054
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               5025 AAAAAAAAAAAAAAAAAAAAAAAAAAA 5054
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1 AAAAAAAAAAAAAAAAAAAAAAAA 30
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    /organism="unidentified"
/mol_type="unassigned DNA"
/db_xref="taxon:32644"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Patent: WO 9720924-A 7 12-JUN-1997;
SAICOM S R L (IT)
                                                                                                                                                                         30 AAAAAAAAAAAAAAAAAAAAAAA 1
                                                                                                                                                                                                                                                       30 bp
Sequence 2 from patent US 6743588.
AR541546
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         35 bp
Sequence 7 from Patent WO9720924.
A63566.1 GI:3717221
               1. .30
/organism="unknown"
/mol_type="genomic DNA"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   /organism="unknown"
/mol_type="genomic DNA"
Location/Qualifiers
                                                                                                                                                                                                                                                                                                      AR541546.1 GI:53933524
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       30; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         unidentified
unidentified
unclassified
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Query Match
Best Local Similarity
Matches 30; Conserval
                                                                                                                                                                                                                                                                                                                                                                      Unclassified.
                                                                                                                                                                                                                                                                                                                                        Unknown.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AGENTS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             RESULT 8
A63566/c
LOCUS
DEFINITION
                  source
                                                                                                                                                                                                                                                                                                                                    SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Bource
                                                                                                                                                                                                                                                                     DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                 TITLE
JOURNAL
FEATURES
                                                                                                                                                                                                                                                                                     ACCESSION
VERSION
KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ACCESSION
VERSION
KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          REFERENCE
AUTHORS
TITLE
                                                                                                                                                                                                                                                                                                                                                                                     REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                      AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          JOURNAL
                                                                                                                                                                                                                                          AR541546
PEATURES
                                                                                                                                                                                                                         RESULT 7
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         COMMENT
                                                                                                                                            ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                g
               PAT 05-DEC-1998
                                                                                                                                                                                                                                                                                                                                                       ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ö
                                                                                                                      Unclassified.

1 (bases 1 to 40)

1 (bases 1 to 40)

Pierce, J. Pearlstein, R.W., Schweiger, B.J., Becker-Manley, M.F. and Pierce, J.W.

Nucleotide sequences of galactinol synthase from zucchini and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   PAT 07-0CT-1997
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1 (bases 1 to 40)
Kerr,P.S., Pearlstein,R.W., Schweiger,B.J., Becker-Manley,M.F. and Pierce,J.W.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        PAT 08-OCT-2004
                                                                                                                                                                                                                                                                                                                                                       Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Nucleotide sequences of galactinol synthase from zucchini and
                                                                                                                                                                                                                                                                                                                                                       ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1 (bases 1 to 30)
Tokunaga,T., Ishiguro,T. and Horie,R.
Fluorescent dye and method of measuring nucleic acid
Patent: US 6743588-A 1 01-JUN-2004;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            DB 1; Length 40;
                                                                                                                                                                                                                                                                                                                     DB 1; Length 40;
               linear
                                                                                                                                                                                                                                                                                                                                                     3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          linear
                                                                                                                                                                                                                                                                                                                                                                                                       3 GGATCCCCCGGGCTGCAGGAATTCGGCACGAGTGTTGT 40
                                                                                                                                                                                                                                                                                                                                                                                     1 GGATCCCCCGGGCTGCAGGAATTCGGCACGAGGGGAGT 38
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1 GGATCCCCCGGGCTGCAGGAATTCGGCACGAGGGGAGT 38
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        GGATCCCCCGGGCTGCAGGAATTCGGCACGAGTGTTGT 40
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            3,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          0.7%; Score 33.2; DB 92.1%; Pred. No. 2.5; tive 0; Mismatches
                                                                                                                                                                                                                                                                                                                    0.7%; Score 33.2; DE 92.1%; Pred. No. 2.5;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Patent: US 5648210-A 11 15-JUL-1997;
Location/Qualifiers
           AR014711 40 bp D
Sequence 11 from patent US 5773699.
AR014711
                                                                                                                                                                                                                                                                                                                                                   0; Mismatches
                                                                                                                                                                                                                       Patent: US 5773699-A 11 30-JUN-1998
                                                                                                                                                                                                                                                       1. .40
/organism="unknown"
/mol_type="unassigned DNA"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  40 bp | 1
Seguence 11 from patent US 5648210.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1. .40
/organism="unknown"
/mol_type="unassigned DNA"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     30 bp
Sequence 1 from patent US 6743588.
AR541545
AR541545.1 GI:53933523
                                                                                                                                                                                                                                       location/Qualifiers
                                                          AR014711.1 GI:3972165
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  I55635
I55635.1 GI:2476429
                                                                                                                                                                                                                                                                                                                                                   35; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Best Local Similarity 92.1
Matches 35; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Unclassified.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Unclassified.
                                                                                                                                                                                                                                                                                                                Query Match
Best Local Similarity
Matches 35; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  .
Unknown.
                                                                                          Unknown
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Unknown
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Unknown
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Unknown
                                                                                                            Unknown
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Query Match
           LOCUS
DEFINITION
ACCESSION
VERSION
KEYWORDS
SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             DEFINITION
ACCESSION
VERSION
KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       RESULT 6
ARS41545/c
LOCUS
DEFINITION
                                                                                                                                                                                                                                                         Bource
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              source
```

ORGANISM

RESULT 5 ISS635

ઠે ద LOCUS

REFERENCE AUTHORS

TITLE

JOURNAL FEATURES

ઠે 8

ö

Gaps

ö

Gaps

ORGANISM ACCESSION VERSION KEYWORDS SOURCE

REFERENCE AUTHORS TITLE JOURNAL

```
PAT 28-JUL-1999
                                                                                                                                                                                                                                                                                                                                                                                                                PAT 27-APR-1998
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1 (bases 1 to 21)
Mitsuhara,I., Oshima,M., Matsufuru,H., Matsukawa,K., Natori,S. and
                                                    Unknows...
Unclassified.
Unclassified.
1 (bases 1 to 30)
Mirkin,C.A., Letsinger,R.L. and Park,S.-J.
Nanoparticles having oligonucleotides attached thereto and uses therefor
Therefor Batent: US 6750016-A 68 15-JUN-2004;
Patent: US 6750016-A 68 15-JUN-2004;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Gaps
                                                                                                                                                                                                                                                                       Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Artificial sequences.
JP 1997252779-A/4
30-SEP-1996 JP 1996068809
MITSUHARA ICHIRO, OSHIMA MASAHIRO, MATSUFURU HIROKI, PI
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   .;
0
                                                                                                                                                                                                                                                                         ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ce 1. .21
/organism='Artificial sequences'.
Location/Qualifiers
                                                                                                                                                                                                                                         DB 1; Length 30;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Query Match

0.4%; Score 21; DB 1; Length 21;
Best Local Similarity 100.0%; Pred. No. 32;
Matches 21; Conservative 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               linear
                                                                                                                                                                                                                                                                                                                                                                                                                     linear
                                                                                                                                                                                                                                                                         Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            PRODUCTION OF PROTEIN IN RECOMBINANT PLANT
PACENT: JP 1997252779-A 4 30-SEP-1997;
NORIN SUISANSYO NOGYO SEIBUTSU SHIGEN KENKYUSHO
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      NATORI SHUNJI, OHASHI YUKO
C12N15/09,A01H5/00,C12N5/10,C12P21/02;
strandedness: Single;
topology: Linear;
                                                                                                                                                                                                                                                                     4;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               DNA
                                                                                                                                                                                                                                                                                                                                                                                                            21 bp DNA PCR primer for tobacco PR1a terminator. E13974
                                                                                                                                                                                                                                                                                                       5039 AAAAAAAAAAAAAAAAAAAAAAAAAAACTC 5067
                                                                                                                                                                                                                                       Query Match 0.4%; Score 22.6; D
Best Local Similarity 86.2%; Pred. No. 24;
Matches 25; Conservative 0; Mismatches
                                                                                                                                                                                                                                                                                                                             1 AAAAAAAAAAAAAAAAAAAGCAGACCTC 29

    .21
    /organism="unidentified"
    /mol_type="genomic DNA"
    /db_xref="taxon:32644"

                                                                                                                                                                             1. .30
/organism="unknown"
/wol_type="genomic DNA"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 21 bp
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     4 TCCCCCGGGCTGCAGGAATTC 24
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TCCCCCGGGCTGCAGGAATTC 21
AR559409.1 GI:53968825
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      E13974.1 GI:3252741
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           OC Artificial Second To None
DE 25-WAR-1996 J PR MITSUHARA ICH MATSUKAWA KASUM,
PI MATSUKAWA KASUM,
PC C12N15/09,A01;
CC strandedness:
CC topology: Linn
FH Key
FT source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     JP 1997252779-A/4.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 unclassified.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    unidentified
unidentified
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Ohashi, Y
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    E14908
                                                                                                                                                                                                                                                                                                                                                                                                                                       DEFINITION
ACCESSION
VERSION
KEYWORDS
SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               source
                                                                                                                                                                                  source
                                 SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    RESULT 13
E14908
LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TITLE
JOURNAL
                                                                                                                                               JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                           RESULT 12
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AUTHORS
                                                                                 REFERENCE
                                                                                                 AUTHORS
   VERSION
KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              FEATURES
                                                                                                                                                                FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    COMMENT
                                                                                                                 TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                          LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ð
                                                                                                                                                                                                                                                                                                              ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Scaggiante, B. and Quadrifoglio, F. A CLASS OF OLIGONUCLEOTIDES, THERAPEUTICALLY USEFUL AS ANTITUMOURAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         PAT 08-OCT-2004
                                                                                                                                                                                              Scaggiante, B. and Quadrifoglio, F.
A CLASS OF OLIGONUCLEOTIDES, THERAPEUTICALLY USEFUL AS ANTITUMOURAL
AGENTS
                                                                                                                                                                                                                                                                                                                                                                                                                                                            ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      PAT 12-MAR-1998
                                                                   PAT 12-MAR-1998
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                            Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           `.;
                                                                                                                                                                                                                                                                                                                                                                                                                                                            ;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Query Match

0.5%; Score 27; DB 1; Length 35;
Best Local Similarity 85.7%; Pred. No. 9.6;
Matches 30; Conservative 0; Mismatches 5; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                          0.5%; Score 27; DB 1; Length 35;
85.7%; Pred. No. 9.6;
tive 0; Mismatches 5; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           linear
                                                                      linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               5025 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 5059
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            5025 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 5059
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      35 AAAAACAAAAACAAAAACAAAAACAAAAA 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        35 AAACAAAAACAAAAACAAAAACAAAAAAAAAAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Patent: WO 9720924-A 15 12-JUN-1997;
SAICOM S. R. L (IT)
Other publication IT MI952539 19970604
Other publication AU 1175497 19970627.
Location/Qualifiers
                                                                                                                                                                                                                                                              Patent: WO 9720924-A 6 12-JUN-1997;
SAICOM S R L (IT)
Other publication IT M1952539 19970604
Other publication AU 1175497 19970627.
Location/Qualifiers
                                                                        DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                /organism="unidentified"
/mol_type="unassigned DNA"
/db_xref="taxon:32644"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           30 bp | Sequence 68 from patent US 6750016.
AR559409

    .35
    organism="unidentified"
|mol_type="unassigned DNA"
|db_xref="taxon:32644"

                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           A63574 35 bp
Sequence 15 from Patent W09720924.
A63574.1 GI:3717229
                                                                   35 bp
Sequence 6 from Patent W09720924.
A63565
A63565.1 GI:3717220
                                                                                                                                                                                                                                                                                                                                                                                                                                                             30; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       unidentified
unidentified
unclassified.
                                                                                                                                                      unidentified
unidentified
unclassified.
                                                                                                                                                                                                                                                                                                                                                                                                                               Query Match
Best Local Similarity
Matches 30; Conserva
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AGENTS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            RESULT 11
AR559409
LOCUS
DEFINITION
ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           LOCUS
DEFINITION
ACCESSION
VERSION
KEYWORDS
SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         source
                                                                                                                                                                                                                                                                                                                                                        source
                                                                                         DEFINITION
ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ORGANISM
                                                                                                                                                                        ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AUTHORS
TITLE
                                                                                                                                                                                                     REFERENCE
AUTHORS
TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              RESULT 10
A63574/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          REFERENCE
                                                                                                                       VERSION
KEYWORDS
SOURCE
                                          RESULT 9
A63565/c
LOCUS
                                                                                                                                                                                                                                                                     JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       FEATURES
                                                                                                                                                                                                                                                                                                                                     FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       COMMENT
                                                                                                                                                                                                                                                                                                    COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ò
```

'n

ö

```
PAT 08-OCT-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           PAT 22-JAN-2000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     PAT 27-AUG-2002
                                                   Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Gapa
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Gapa
                                                                                                                                                                                                                                                                                        Unclassified.

1 (bases 1 to 21)

Mitsubara, 1. (babima, M. and Obashi, Y.

Pathogen-resistant plants transformed with a DNA encoding sarcotcoxin 1A linked to a signal peptide and a method for production thereof Patent: US 6750381-A 4 15-JUN-2004;
                                                  ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     linear
                    Query Match 0.4%; Score 21; DB 1; Length 21; Best Local Similarity 100.0%; Pred. No. 32; Matches 21; Conservative 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          DB 1; Length 21; 32;
                                                                                                                                                                                     linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  0.4%; Score 21; DB 1; Length 24;
100.0%; Pred. No. 33;
iive 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1 (bases 1 to 24)
Huttner, B. and Betzner, A.S.
PROTEIN COMPLEMENTATION IN TRANSGENIC PLANTS
BATCH: WO 9837211-A 24 27-AUG-1998;
GENE SHEARS PTY LTD (AU); HUTTNER ERIC (AU)
                                                                                                                                                                                     DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Query Match 0.4%; Score 21; DB Best Local Similarity 100.0%; Pred. No. 32; Matches 21; Conservative 0; Mismatches

    .24
    /organism="unidentified"
    /mol_type="unassigned DNA"
    /db_xref="taxon:32644"

                                                                                                                                                                            AR559758 21 bp
Sequence 4 from patent US 6750381.
AR559758
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       24 bp
Sequence 24 from Patent W09837211.
A87299
                                                                                                                                                                                                                                                                                                                                                                                                                                              /mol_type="genomic DNA"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     24 bp
                                                                                                                                                                                                                                                                                                                                                                                                    Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                              /organism="unknown"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Location/Qualifiers
                                                                              4 TCCCCCCGGCTGCAGGAATTC 24
                                                                                                        21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TCCCCCGGGCTGCAGGAATTC 24
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TCCCCCGGGCTGCAGGAATTC 21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1 GGATCCCCCGGGCTGCAGGAA 21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        24
                                                                                                          1 receeçeserecassarre
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               GGATCCCCCGGGCTGCAGGAA
                                                                                                                                                                                                                              AR559758.1 GI:53969858
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       A87299.1 GI:6736064
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                21; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  unidentified
unclassified
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   unidentified
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     BD057377
                                                                                                                                                                                                                                                             Unknown
                                                                                                                                                                                                                                                                              Unknown.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                   source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        DEFINITION
ACCESSION
VERSION
KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            source
                                                                                                                                                                                                   DEFINITION
                                                                                                                                                                                                                                                                             ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ORGANISM
                                                                                                                                                                                                              ACCESSION
VERSION
KEYWORDS
SOURCE
                                                                                                                                                    RESULT 15
AR559758
LOCUS
                                                                                                                                                                                                                                                                                                       REFERENCE
AUTHORS
TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            RESULT 16
A87299
LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    RESULT 17
BD057377
LOCUS
                                                                                                                                                                                                                                                                                                                                                                                    JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                    FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       SOURCE
                                                                                                       g
                                                                               ઠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             원
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        용
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       21 bp DNA linear PAT 18-JUN-2001 Anti-pathogenic mold plant and method for constructing the same. E64706
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ICHIRO MITSUHARA, MASAHIRO OSHIMA, YUKO OHASHI
A01H1/00,C07K14/435,C12NS/10,C12N15/09//C12P21/02,(C12N15/09,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Tobases I to 21)
Ichiro,M., Masshiro,O. and Yuko,O.
Anti-pathogenia mold plant and method for constructing the same batent: JP 199311848-A 4 24-NOV-1999;
NATL INST OF AGROBIOLOGICAL RESOUCES
OS Unidentified
PN JP 1999318248-A/4
PD 24-NOV-1999
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Gaps
                                                                                                       1 (bases 1 to 21)
Mitsuhara, I., Oshima, M. and Ohashi, Y.
PLANT HAVING RESISTANCE TO PATHOGENIC FUNGI AND ITS CREATION
Patent: JP 19980548187-A 4 03-FEB-1998;
NORIN SUISANSYO NOGYO SEIBUTSU SHIGEN KENKYUSHO
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ..
0
                                                                                                                                                                                                                                                          MITSUHARA ICHIRO, OSHIMA MASAHIRO, OHASHI YUKO PC
/00,C12N5/10,C12N15/09//C12P21/02;
Btrandedness: Single;
                                                                                                                                                                                                                                                                                                                                             ce 1..21 /organism='Artificial sequences'. Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Length 21;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     /organism='Unidentified'.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CI2RI:91),
CI2NS/00,C12NIS/00,(C12NIS/00,C12RI:91)
Topology: Linear;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Location/Qualifiers
                                                                                                                                                                                                                                                                                                                       Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Query Match 0.4%; Score 21; DB 1;
Best Local Similarity 100.0%; Pred. No. 32;
Matches 21; Conservative 0; Mismatches
    PCR primer for tobacco PR1a terminator.
                                                                                                                                                                                                                                                                                                                                                                                                  1. .21
/organism="unidentified"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    /organism="unidentified"
/mol_type="genomic DNA"
/db_xref="taxon:32644"
                                                                                                                                                                                                                                                                                                                                                                                                                             /mol_type="genomic DNA"
/db_xref="taxon:32644"
                                                                                                                                                                                             Artificial sequences.
JP 1998028487-A/4
03-FEB-1998
17-JUL-1996 JP 1996187763
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     07-APR-1999 JP 1999100698
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1 TCCCCCGGGCTGCAGGAATTC 21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    4 TCCCCCGGGCTGCAGGAATTC 24
                            E14908.1 GI:5709591
JP 1938028487-A/4.
unidentified
unclassified.
                                                                                                                                                                                                                                                                                                           topology: Linear;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      E64706.1 GI:13017870
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     JP 1999318248-A/4.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                unidentified
unidentified
unclassified.
                                                                                                                                                                                                                                                                                                                                                      source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            source
                                                                                                                                                                                DEFINITION
ACCESSION
VERSION
KEYWORDS
SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                    source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   DEFINITION
ACCESSION
VERSION
KEYWORDS
SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Bource
                                                                                                     REFERENCE
AUTHORS
TITLE
JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           RESULT 14
E64706
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            REFERENCE
AUTHORS
TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                 FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         FEATURES
                                                                                                                                                                                COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            셤
```

ö

ô

```
Patent: US 6759199-A 55 06-JUL-2004;
Location/Qualifiers
1. .20
/organism="unknown"
                                                                                                                                        Patent: US 6750016-A 55 15-JUN-2004;
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1 Similarity 100.0%; Pred. No. 39; 20; Conservative 0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          20 bp
Sequence 55 from patent US 6759199.
AR561993
                                                                                                                                                                                                                                                                                                                                                                                     AR559411 20 bp 1
Sequence 70 from patent US 6750016.
AR559411
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1. .20
/organism="unknown"
/mol_type="genomic DNA"
                                                                                                                                                                        1. .20
/organism="unknown"
/mol_type="genomic DNA"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       0.4%; Score 20;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               5025 AAAAAAAAAAAAAAA 5044
                                                                                                                                                                                                                                                                                      5025 AAAAAAAAAAAAAAA 5044
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AR561993.1 GI:53975645
            AR559396.1 GI:53968812
                                                                                                                                                                                                                                                                                                                                                                                                                                   AR559411.1 GI:53968827
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Unknown.
Unclassified.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Unknown
AR559396
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Unknown.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Unknown
                                         Unknown
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Query Match
Best Local S:
Matches 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 DEFINITION
ACCESSION
VERSION
KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            SOURCE
ORGANISM
                                                                                                                                                                           source
                                                                                                                                                                                                                                                                                                                                                                                                         DEFINITION
ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         RESULT 21
AR561993
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AUTHORS
TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           JOURNAL
                                                          ORGANISM
                                                                                                  AUTHORS
TITLE
                                                                                                                                                                                                                                                                                                                                                                RESULT 20
AR559411
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                     VERSION
KEYWORDS
SOURCE
                                                                                                                                              JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             REFERENCE
 ACCESSION
                                                                                    REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          FEATURES
               VERSION
KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TITLE
                                             SOURCE
                                                                                                                                                                                                                                                                                                                                                                                              LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ò
                                                     synthetic construct
synthetic construct
construct
construct
other sequences; artificial sequences.

1 (Lases I to 24)
Protein complementation in transgenic plants
L patent: JP 201512322-A 21 21-AUG-2001;
GENE SHEARS PTY LTD
PN JP 2001512322-A/21
PP 21-AUG-2001
PP 20-FEB-1998 JP 1998536400
PR 21-FEB-1997 GB 9703681.8
PI WYATT PAUL, PASCUAL PEREZ, ERIC HUTTNER, ANDREAS STEFAN BETZNER
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           PAT 08-OCT-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      PAT 08-OCT-2004
                                                                                                                                                                                                                                                        PC
A01H5/00,C12N5/10,C12N9/22,C12N15/09//C12Q1/68,C12N15/00,C12N5/ PC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1 (bases 1 to 20)
Mirkhin,C.A., Lestsinger,R.L., Mucic,R.C., Storhoff,J.J.,
Mipanian,R. and Taton,T.A.
Nanoparticles having oligonucleotides attached thereto and uses
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         .
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              / Match 0.4%; Score 20; DB 1; Length 20; Local Similarity 100.0%; Pred. No. 39; or Indels nes 20; Conservative 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              linear
                                                                                                                                                                                                                                                                                                                                                                                                                                         Query Match 0.4%; Score 21; DB 1; Length 24; Best Local Similarity 100.0%; Pred. No. 33; Matches 21; Conservative 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       linear
       Protein complementation in transgenic plants.
                                                                                                                                                                                                                                                                                                                                         Location/Qualifiers

    .24
    forganism="synthetic construct"
|moi type="genomic DNA"
|db_xref="taxon:32630"

                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Patent: US 6730269-A 55 04-MAY-2004;
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ARS59396 20 bp 1 Sequence 55 from patent US 6750016.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AR532682 20 bp 1
Sequence 55 from patent US 6730269.
AR532682
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1. .20
/organism="unknown"
/wol_type="genomic DNA"
                                                                                                                                                                                                                                                                                                                  Topology: Linear;
/note= 'Figure 1G: Ubqla'
                                                                                                                                                                                                                                                                                                                                                        Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             5025 AAAAAAAAAAAAAAAAA 5044
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1 GGATCCCCGGGCTGCAGGAA 21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          GGATCCCCCGGGCTGCAGGAA 24
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Strandedness: Single;
                     BD057377
BD057377.1 GI:22602983
JP 2001512322-A/21.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AR532682.1 GI:53922053
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Unknown.
Unclassified.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      therefor
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Unknown.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Query Match
Best Local S
Matches 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ARSS9396
LOCUS
DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     DEFINITION
ACCESSION
VERSION
KEYWORDS
SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 source
      DEFINITION
ACCESSION
VERSION
KEYWORDS
SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                            source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       RESULT 19
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  JOURNAL
                                                                                                           REFERENCE
AUTHORS
TITLE
JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ARS32682
LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               RESULT 18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   FEATURES
                                                                                                                                                                                                                                                                                                                                                             FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TITLE
                                                                                                                                                                                   COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    엄
```

```
ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             PAT 08-OCT-2004
                                                                                                                                                                                                                                                                                     ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              PAT 08-OCT-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1 (bases I to 20)
Mirkin, C.A., Letsinger, R.L., Mucic, R.C., Storhoff, J.J.,
Elghanian, R. and Taton, T.A.
Nanoparticles having oligomucleotides attached thereto and uses
therefor
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Unclassified.

1 (bases 1 to 20)
Mirkin, C.A., Letsinger, R.L. and Park, S.-J.
Manoparticles having oligonucleotides attached thereto and uses therefor
Patent: US 6750016-A 70 15-JUN-2004;
Unknown.
Unclassified.
1 (bases 1 to 20)
Mirkin,C.A., Letsinger,R.L. and Park,S.-J.
Nanoparticles having oligonucleotides attached thereto and uses therefor
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Gaps
                                                                                                                                                                                                                                                                                          Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ö
                                                                                                                                                                                                                                                                                          ..
0
                                                                                                                                                                                                                                           Query Match 0.4%; Score 20; DB 1; Length 20; Best Local Similarity 100.0%; Pred. No. 39; Matches 20; Conservative 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           DB 1; Length 20; 39;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  DNA
```

셤

```
ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              PAT 26-SEP-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ö
                                  PAT 09-MAR-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            PAT 23-AUG-2004
                                                                                                                                          Eukaryota, Viridiplantae, Streptophyta, Embryophyta, Tracheophyta,
Spermatophyta, Magnoliophyta, Liliopsida, Poales, Poaceae, PACCAD
clade, Panicoideae, Andropogoneae, Zea.
                                                                                                                                                                                                       Loerz, H., Dresselhaus, T., Schreiber, D. and Heuer, S. Regulatory sequences for pollen specific or pollen abundant gene expression in plants
Patent: WO 0112799-A 26 22-FEB-2001;
Suedwestdeutsche Saatzucht (DE)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Gapa
                                                                                                                                                                                                                                                                                                                                                                                                                   Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                   ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1 (bases 1 to 21)
Steele, C.L., Bohlmann, J. and Croteau, R.B.
Monoterpene synthases from grand fir (Ables grandis)
Patent: US 6429014-A 35 06-AUG-2002;
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              linear
                                                                                                                                                                                                                                                                                                                                                                                  Length 20;
                                  linear

    Length 21;

                                                                                                                                                                                                                                                                                                                                                                                                                   0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Hooper, J.W., Schmaljohn, C.S. and Custer, M.
                                                                                                                                                                                                                                                                                                                                                                                 0.4%; Score 20; DB 1;
100.0%; Pred. No. 39;
:ive 0; Mismatches
                                  DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        synthetic construct
synthetic construct
other sequences; artificial sequences.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CQ855140 24 bp DN
Seguence 6 from Patent WO2004058808.
CQ855140
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Sequence 35 from patent US 6429014.
                                                                                                                                                                                                                                                                                                                                 /mol_type="unassigned DNA" /db_xref="taxon:4577"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 0.4%; Score 20; DB
100.0%; Pred. No. 39;
tive 0; Mismatches
                                AX085373 20 bp
Sequence 26 from Patent WO0112799.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1. .21
/organism="unknown"
/mol_type="genomic DNA"
                                                                                                                                                                                                                                                                                                        1. .20
/organism="Zea mays"
                                                                                                                                                                                                                                                                                      Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                               13 CTGCAGGAATTCGGCACGAG 32
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1 CTGCAGGAATTCGGCACGAG 20
                                                                               AX085373.1 GI:13275428
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AR222119.1 GI:23329493
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CQ855140.1 GI:51510569
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Query Match
Best Local Similarity 100.0
Matches 20; Conservative
                                                                                                                                                                                                                                                                                                                                                                                 Query Match
Best Local Similarity 100.0
Matches 20; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Unclassified
                                                                                                                Zea maув
Zea maув
                                                              AX085373
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Unknown.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Unknown
RESULT 24
AX085373
LOCUS
DEFINITION
ACCESSION
VERSION
KEYWORDS
SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ACCESSION
VERSION
KEYWORDS
SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                          source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TITLE
JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ACCESSION
VERSION
KEYWORDS
                                                                                                                                                                                          REFERENCE
AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               RESULT 25
AR222119
LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        REFERENCE
AUTHORS
                                                                                                                                                                                                                                                        JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              RESULT 26
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CQ855140
LOCUS
                                                                                                                                                                                                                                                                                      PEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        FEATURES
                                                                                                                                                                                                                       TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        셤
                                                                ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ö
                                                                                                                                                                                                          PAT 08-OCT-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         PAT 09-MAR-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Bukaryota, Viridiplantae, Streptophyta, Embryophyta, Tracheophyta,
Spermatophyta, Magnoliophyta, Liliopsida, Poales, Poaceae, PACCAD
clade, Panicoldeae, Andropogoneae, Zea.
                                                                                                                                                                                                                                                                                                                  1 (bases 1 to 20)
Mirkin, C.A., Letsinger,R.L., Mucic,R.C., Storhoff,J.J.,
Elghanian,R., Taton,T.A., Garimella,V. and Li,Z.
Nanoparticles having oligonucleotides attached thereto and uses therefor
                                                                 Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Gaps
                                                                 .
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ô
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Loerz, H., Dresselhaus, T., Schreiber, D. and Heuer, S.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Query Match 0.4%; Score 20; DB 1; Length 20; Best Local Similarity 100.0%; Pred. No. 39; Matches 20; Conservative 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         0.4%; Score 20; DB 1; Length 20; 100.0%; Pred. No. 39; tive 0; Mismatches 0; Indels
                                Length 20;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         linear
                               0.4%; Score 20; DB 1;
Similarity 100.0%; Pred. No. 39;
20; Conservative 0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         DNA
                                                                                                                                                                                                                                                                                                                                                                                                              Patent: US 6767702-A 55 27-JUL-2004;
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Male sterile plants
Patent: WO 0112798-A 26 22-FEB-2001;
Suedwestdeutsche Saatzucht (DE)
                                                                                                                                                                                                  20 bp 1
Sequence 55 from patent US 6767702.
AR565165
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           /organism="Zea mays"
/mol_type="unassigned DNA"
/db_xref="taxon:4577"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AX085176 20 bp
Sequence 26 from Patent WO0112798.
AX085176
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             /mol_type="genomic DNA"
   /mol_type="genomic DNA"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                               1. .20
/organism="unknown"
                                                                                             5025 AAAAAAAAAAAAAAAAA 5044
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           5025 AAAAAAAAAAAAAAAAA 5044
                                                                                                              1 AAAAAAAAAAAAAAAAA 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          5 CCCCCGGGCTGCAGGAATTC 24
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1 CCCCGGGCTGCAGGAATTC 20
                                                                                                                                                                                                                                                     AR565165.1 GI:53981003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AX085176.1 GI:13275268
                                                                20; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Best Local Similarity 100.
Matches 20, Conservative
                                                                                                                                                                                                                                                                               .
Unknown.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Zea mays
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       2еа шаув
                                                                                                                                                                                                                                                                                                   Unknown
                                Query Match
Best Local (
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Query Match
                                                                                                                                                                                                                    DEFINITION
ACCESSION
VERSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  DECENTION
ACCESSION
VERSION
KEYWORDS
SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                   source
                                                                                                                                                                                                                                                                                                   ORGANISM
                                                                                                                                                                      RESULT 22
AR565165
LOCUS
                                                                                                                                                                                                                                                                                                                                 REFERENCE
AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                JOURNAL
FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       RESULT 23
AX085176
LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 REFERENCE
AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TITLE
JOURNAL
                                                                Matches
                                                                                                                                                                                                                                                                    KEYWORDS
SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               FEATURES
                                                                                                                                                                                                                                                                                                                                                                                 TITLE
```

g

ઠે

Gaps

;

PAT 03-JUN-2004

g

```
1 (bases 1 to 19)
Manoharan, M. and Mohan, V.
Oligonucleotides having A-DNA form and B-DNA form conformational
                                                                                                                                                                                                                                                                                                                                                                                                                            1. .19
/organism="synthetic construct"
/mol_type="unassigned DNA"
/db xref="taxon:32650"
/noTe="Description of Artificial Sequence:primer"
DB 1; Length 24;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Query Match
0.4%; Score 19; DB 1; Length 19;
Best Local Similarity 100.0%; Pred. No. 48;
Matches 19; Conservative 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ch 0.4%; Score 19; DB 1; Length 19; 1 Similarity 100.0%; Pred. No. 48; 19; Conservative 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          linear
                                                                                                                                                                                   linear
                                 3; Indels
                                                                                                                                                                                                                                                                                                                                    Toursev, A., Tashpulatov, A.S. and Heberle-Bors, E.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      RESULT 31
AR541351/c 10787 AR541351
DIOCUS AR541351
DEFINITION Sequence 16 from patent US 6737520.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           DNA
                                                                                                                                                                                     DNA
                                                                                                                                                                                                                                                                                                                                                                     ARC Seibersdorf research GmbH (AT)
Location/Qualifiers
                                                                                                                                                                                                                                                                                        synthetic construct
other sequences; artificial sequences.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               geometry
Patent: US 6737520-A 15 18-MAY-2004;
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   19 bp sequence 15 from patent US 6737520. AR541350 GI:53932997
                                                                                                                                                                                   CQ817044 19 bp D.
Sequence 6 from Patent WO2004042066.
CQ817044
Query Match 0.4%; Score 19.2; D
Best Local Similarity 87.5%; Pred. No. 47;
Matches 21; Conservative 0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1. .19
/organism="unknown"
/mol_type="genomic DNA"
                                                                    5025 AAAAAAAAAAAAAAAAAAAAAAAA 5048
                                                                                                24 AAAAACAAAAAAACAAAAAAAAA 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                5025 AAAAAAAAAAAAAAAA 5043
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           5065 CTCGAGGGGGGCCCGGTA 5083
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 19 дадададададададада 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CTCGAGGGGGGCCCGGTA 1
                                                                                                                                                                                                                                     CQ817044.1 GI:48145282
                                                                                                                                                                                                                                                                          synthetic construct
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Query Match
Best Local Similarity
Matches 19; Conservat
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Unclassified.
                                                                                                                                                                                                                                                                                                                                                         NtSM GENE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Unknown.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Unknown.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              13
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             DEFINITION
ACCESSION
VERSION
                                                                                                                                                                                                                                                                                                                                                                                                                                source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 RESULT 30
AR541350/c
LOCUS
                                                                                                                                                         RESULT 29
CQ817044/c
LOCUS
                                                                                                                                                                                                     DEFINITION
ACCESSION
VERSION
KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 REFERENCE
AUTHORS
TITLE
                                                                                                                                                                                                                                                                                           ORGANISM
                                                                                                                                                                                                                                                                                                                                           AUTHORS
TITLE
JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                KEYWORDS
SOURCE
                                                                                                                                                                                                                                                                                                                             REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                FEATURES
                                                                                                                                                                                                                                                                             SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          q
                                                                          ઠે
                                                                                                      g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        PAT 01-MAR-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ö
                                                                                                                                                                                                                               ö
                                                                                                                                                                                                                                                                                                                                                                                  PAT 30-APR-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Krieg,A.M., Schetter,C. and Vollmer,J.C.
Immunostimulatory nucleic acids
Patent: WO 0122972-A 60 05-APR-2001;
UNIVERSITY OF IOWA RESEARCH FOUNDATION (US) ; Coley Pharmaceutical
GmbH (DE)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Gaps
                                                                                                                                                                                                                               Gaps
          Dna vaccines against hantavirus infections
Patent: WO 2004058808-A 6 15-JUL-2004;
U.S. Army Medical Research Institute of Infectious Diseas es
Department of the Army (US)
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ;
0
                                                                                                                                                                                                                               ö
                                                                                               1...24
/organism="synthetic construct"
/organism="synthetic DNA"
/db_xref="taxon:32630"
/noTe="Sequence of 24 bp extraneous sequence"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Query Match 0.4%; Score 19.2; DB 1; Length 24; Best Local Similarity 87.5%; Pred. No. 47; Matches 21; Conservative 0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            linear
                                                                                                                                                                                              Length 24;
                                                                                                                                                                                                                                                                                                                                                                                   linear
                                                                                                                                                                                                                               0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Bratzler, R.L. Inhibition of angiogenesis by nucleic acids Inhibition of angiogenesis by nucleic acids Patent: Wo 02053141-A 60 11-JUL-2002; Coley Pharmaceutical Group, Inc. (US) Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1. .24
/organism="synthetic construct"
/mol_type="unassigned DNA"
/mb_xref="taxon:32630"
/noTe="Synthetic Sequence"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1.24
/organism="synthetic construct"
/mol type="unassigned DNA"
/db_xref="taxon:32630"
                                                                                                                                                                                              Query Match 0.4%; Score 20; DB 1; Best Local Similarity 100.0%; Pred. No. 40; Matches 20; Conservative 0; Mismatches (
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           other sequences; artificial sequences.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   other sequences; artificial sequences.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AX546921 24 bp Sequence 60 from Patent WO02053141. AX546921
                                                                                                                                                                                                                                                                                                                                                                                     AX103868 24 bp
Sequence 60 from Patent WO0122972.
AX103868 4X103868.1 GI:13920065
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           5025 AAAAAAAAAAAAAAAAAAAAAA 5048
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         24 AAAAACAAAAAAAAAAAAAAA 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Location/Qualifiers
                                                                                                                                                                                                                                                                                      CTGCAGGAATTCGGCACGAG 24
                                                                                                                                                                                                                                                                    13 CTGCAGGAATTCGGCACGAG 32
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AX546921.1 GI:25812065
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              synthetic construct
synthetic construct
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        synthetic construct
synthetic construct
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             DEFINITION
ACCESSION
VERSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      source
                                                                                                                                                                                                                                                                                                                                                                                                                                          VERSION
KEYWORDS
SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               KEYWORDS
SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AX546921/c
LOCUS
                                                                                                                                                                                                                                                                                                                                                                       AX103868/c
LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                       DEFINITION
ACCESSION
                                                                                                        source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                REFERENCE
AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TITLE
JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 RESULT 28
                   TITLE
JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   FEATURES
                                                                                                                                                                                                                                                                                                                                                         RESULT 27
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              FEATURES
                                                                                    PEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ઠ
```

PAT 08-OCT-2004

ö

Gaps

PAT 08-OCT-2004

ö

Gaps

; 0

σ

ö

Gapa

ö

PAT 08-OCT-2004

```
1 (bases 1 to 19)
Manoharan,M. and Mohan,V.
Oligonucleotides having A-DNA form and B-DNA form conformational
geometry
Patent: US 6737520-A 26 18-MAY-2004;
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1 (bases 1 to 20)
Zsebo, K.M., Bosselman, R.A., Suggs, S.V. and Martin, F.H. Method of preparing human stem cell factor polypeptide Patent: US 6759215-A 33 06-JUL-2004;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    linear
                                                                                                                                                                                        linear
                   Score 19; DB 1; Length 19;
Pred. No. 48;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Length 19;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Query Match 0.4%; Score 19; DB 1; Length 20; Best Local Similarity 100.0%; Pred. No. 48; Matches 19; Conservative 0; Mismatches 0; Indele
                                                 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Indela
                                                                                                                                                                                                                                                                                                                                                                                                                                                                Query Match 0.4%; Score 19; DB 1;
Best Local Similarity 100.0%; Pred. No. 48;
Matches 19; Conservative 0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              25 bp DN Sequence 391 from patent US 6468749. AR239256 AR239256.1 GI:27284331
                   Query Match 0.4%; Score 19; DB Best Local Similarity 100.0%; Pred. No. 48; Matches 19; Conservative 0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Sequence 33 from patent US 6759215.
                                                                                                                                                                                     19 bp
Sequence 26 from patent US 6737520.
                                                                                                                                                                                                                                                                                                                                                                                                     1. .19
/organism="unknown"
/wol_type="genomic DNA"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 /organism="unknown"
/mol_type="genomic DNA"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Location/Qualifiers
                                                                             5025 AAAAAAAAAAAAAAA 5043
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            5025 AAAAAAAAAAAAAAA 5043
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             5024 TAAAAAAAAAAAAAAA 5042
                                                                                                          19 AAAAAAAAAAAAAAA 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          19 AAAAAAAAAAAAAAAA 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  19 TAAAAAAAAAAAAAAA 1
                                                                                                                                                                                                                                 AR541361.1 GI:53933008
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AR562157.1 GI:53976020
                                                                                                                                                                                                                                                                                              Unclassified.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Unknown.
Unclassified.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Unknown.
                                                                                                                                                                                                                                                                 Unknown.
                                                                                                                                                                                                                                                                               Unknown.
                                                                                                                                                                                                                                                                                                                                                                                                       source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  DEFINITION
ACCESSION
VERSION
KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Bource
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               DEFINITION
ACCESSION
VERSION
                                                                                                                                                        RESULT 34
AR541361/c
LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AR239256/c
LOCUS
                                                                                                                                                                                                     DEFINITION
                                                                                                                                                                                                                                                                               ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         RESULT 35
AR562157/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ORGANISM
                                                                                                                                                                                                                   ACCESSION
VERSION
KEYWORDS
SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TITLE
JOURNAL
FEATURES
                                                                                                                                                                                                                                                                                                                                                                        JOURNAL
                                                                                                                                                                                                                                                                                                          REFERENCE
                                                                                                                                                                                                                                                                                                                            AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         RESULT 36
                                                                                                                                                                                                                                                                                                                                          TITLE
                                                                                                       셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         셤
                                                                                                                                                                                                                                                                               ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ö
                                                                                                                                                                                                                                                                                                                                                                                                                     PAT 08-OCT-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     linear PAT 08-OCT-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1 (bases 1 to 19)
Manohazan,M. and Mohan,V.
Oligonucleotides having A-DNA form and B-DNA form conformational
geometry US 6737520-A 17 18-MAY-2004;
Location/Qualifiers
                                                                            1 (bases 1 to 19)
Manoharan, M. and Mohan, V.
Oligonucleotides having A-DNA form and B-DNA form conformational
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1 (bases 1 to 19)
Manoharan, M. and Mohan, V.
Oligonucleotides having A-DNA form and B-DNA form conformational
                                                                                                                                                                                                                                                                               Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ö
                                                                                                                                                                                                                                                                               ö
                                                                                                                                                                                                                                              Query Match 0.4%; Score 19; DB 1; Length 19; Best Local Similarity 100.0%; Pred. No. 48; Matches 19; Conservative 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                     linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Length 19;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Ouery Match 0.4%; Score 19; DB 1; Best Local Similarity 100.0%; Pred. No. 48; Matches 19; Conservative 0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                     DNA
                                                                                                                                                     Patent: US 6737520-A 16 18-MAY-2004;
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Patent: US 6737520-A 18 18-MAY-2004;
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                               Sequence 17 from patent US 6737520.
AR541352
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Sequence 18 from patent US 6737520.
ARS41353

    19 /organism="unknown"
/mol_type="genomic DNA"

    19
    /organism="unknown"
    /mol_type="genomic DNA"

                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  /mol_type="genomic DNA"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  /organism="unknown"
                                                                                                                                                                                                                                                                                                          5025 AAAAAAAAAAAAAAAA 5043
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           5025 AAAAAAAAAAAAAAA 5043
                                                                                                                                                                                                                                                                                                                             19 AAAAAAAAAAAAAAAA 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AR541351
AR541351.1 GI:53932998
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ARS41353.1 GI:53933000
                                                                                                                                                                                                                                                                                                                                                                                                                                                              AR541352.1 GI:53932999
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Unclassified.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Unclassified.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        geometry
                                            Unknown
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Unknown.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Unknown.
                                                               Unknown
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Unknown
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Unknown
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         13
ACCESSION
VERSION
KEYWORDS
SOURCE
ORGANISM
                                                                                                                                                                                      source
                                                                                                                                                                                                                                                                                                                                                                                                                              DEFINITION
ACCESSION
VERSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             KEYWORDS
SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             VERSION
KEYWORDS
SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                    RESULT 32
AR541352/c
LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    RESULT 33
ARS41353/c
LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 DEFINITION
ACCESSION
                                                                                       REFERENCE
AUTHORS
TITLE
                                                                                                                                                   JOURNAL
FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       REFERENCE
AUTHORS
TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    JOURNAL
FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        REFERENCE
AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     JOURNAL
```

ઠે 음 ö

Gapa

ö

PAT 08-OCT-2004

ö

ö

PAT 20-DEC-2002

TITLE

g ò

```
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AX815621.1 GI:39646318
                                                                                                                                                                                                                                                                                                          AR068314.1 GI:6000521
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Homo sapiens (human)
                                                                                               Query Match 0.4%
Best Local Similarity 95.0%
Matches 19; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Best Local Similarity
Matches 19; Conserv
                                                                                                                                                                                                                                                                                                                                        Unknown.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ACCESSION
VERSION
KEYWORDS
SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              RESULT 40
AX815621/c
                                                                                                                                                                                                                                                                                                                                           SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       DEFINITION
                                                                                                                                                                                                                                                                               DEFINITION
                                                                                                                                                                                                                                                                                            ACCESSION
VERSION
KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                   REFERENCE
AUTHORS
TITLE
                                                                                                                                                                                                                                   RESULT 39
AR068314
                                                                                                                                                                                                                                                                                                                                                                                                                                                 JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         FEATURES
         FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                               FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ò
                                                                                                                                                             ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              PAT 11-MAR-1997
                                                                                                                                                                                                                                                                                                                                                                                          PAT 02-NOV-2001
                                                                                                                                                                                                                                                      ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    unidentified unclassified.

1 (bases 1 to 20)
Hesse,F., Ambrosius,D. and Burtscher,H.
Hesse,F., Ambrosius,D. and Burtscher,H.
RECOMBINANT PROTEINASE FROM CLOSTRIDIUM HYSTOLYTICUM AND THE USE THEREOF FOR ISOLATING CELLS AND CELL GROUPS
Patent: WO 9619583-A 15 27-UJW-1996;
BOEHRINGER MANNHEIM GMBH (DE)
Other publication AU 4346696 960710
Other publication DE 4445891 960627.
                                                  Unclossified.
Unclossified.
1 (bases 1 to 25)
Ulanovsky,L., Mugasimangalam,R.C., Einat,P., Zezin-Sonkin,D. and Gilad,S.
Sequence-dependent gene sorting techniques
Patent: US 6468749-A 391 22-OCT-2002;
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Ulanovsky, L., Mugasimangalam, R., Einat, P., Zezin-Sonkin, D. and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            .
0
                                                                                                                                                                                                                                                       ö
                                                                                                                                                                                                                      Query Match 0.4%; Score 18.8; DB 1; Length 25; Best Local Similarity 90.9%; Pred. No. 51; Matches 20; Conservative 0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Length 25;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 linear
                                                                                                                                                                                                                                                                                                                                                                                           linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Sequence-dependent gene sorting techniques Patent: WO 0175180-A 391 11-OCT-2001; Obi Enterprises Ltd. (US)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            0.4%; Score 18.8; DB 1;
ilarity 90.9%; Pred. No. 51;
Conservative 0; Mismatches 2;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                /organism="synthetic construct"
/mol_type="unassigned DNA"
/db_xref="taxon:32630"
/note="primer"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    synthetic construct
synthetic construct
other sequences; artificial sequences.
                                                                                                                                                                                                                                                                                                                                                                                              25 pp
Sequence 391 from Patent W00175180.
AX279058
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           20 bp
Sequence 15 from Patent WO9619583.
A52122
                                                                                                                                                                  1. .25
/organism="unknown"
/mol_type="genomic DNA"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          2851 CCAGAGGATCCTGCCATAGCAC 2872
                                                                                                                                                                                                                                                                                    2851 CCAGAGGATCCTGCCATAGCAC 2872
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       25 ccadaddarccrdcrdradcac 4
                                                                                                                                                                                                                                                                                                       25 CCAGAGGATCCTGCTGTAGCAC 4
                                                                                                                                                                                                                                                                                                                                                                                                                                        AX279058.1 GI:16606512
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              A52122.1 GI:2304728
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              unidentified
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Best Local Similarity
Matches 20; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Shlomit, G.
                                              Unknown
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Query Match
                                                                                                                                                                                                                                                                                                                                                                                                         DEFINITION
ACCESSION
VERSION
KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      SOURCE
                                                                                                                                                                      source
                                                                                                                                                                                                                                                                                                                                                                RESULT 37
AX279058/c
LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ACCESSION
VERSION
KEYWORDS
SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ORGANISM
                                            ORGANISM
                                                                                                                   TITLE
JOURNAL
FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    REFERENCE
AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     JOURNAL
                                                                          REFERENCE
AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        RESULT 38
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                JOURNAL
                 KEYWORDS
SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        원
```

```
ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              PAT 09-DEC-2003
                                                                                                                                                                                                                                                                                                  PAT 29-SEP-1999
                                                                                                                            ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Eukaryoja, Metazoa, Chordata, Craniata, Vertebrata, Euteleostomi,
Mammalia, Eutheria, Primates, Catarrhini, Hominidae, Homo.
                                                                                                                                                                                                                                                                                                                                                                                                                 Unknown.
Unclassified.
Unclassified.
1 (bases 1 to 20)
1 Hesse, F., Ambrosius, D. and Burtscher, H.
Recombinant proteinase from clostridium histolyticum and its use for isolating cells and groups of cells
Fatent: US 5853976-A 15 29-DEC-1998;
Fatent: US 5853976-A 15 29-DEC-1998;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Gaps
                                                                                                                            Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Schwab, M. and Schaeffeler, B.
Polymorphisms in the human gene for tpmt and their use in
diagnostic and therapeutic applications
Patent: WO 01066892-A 7 14-AUG-2003;
Epidauros Biotechnologie AG (DE)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           .
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ö
                                                                                                                            ;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ch 0.4%; Score 18.4; DB 1; Length 20; 1 Similarity 95.0%; Pred. No. 54; 19; Conservative 0; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       DB 1; Length 22;
                                                                                      Length 20;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Indels
                                                                                                                            1; Indels
                                                                                                                                                                                                                                                                                                        linear
                                                                                          ۲;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    DNA
                                                                                                                                                                                                                                                                                                        DNA
                                                                                          BB
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Query Match 0.4%; Score 18.4; I Best Local Similarity 95.0%; Pred. No. 55; Matches 19; Conservative 0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1. .22
/organism="Homo sapiens"
/mol_type="unassigned DNA"
/db_xref="taxon:9606"
                                                                                        0.4%; Score 18.4; D
95.0%; Pred. No. 54;
tive 0; Mismatches
                                                                                                                                                                                                                                                                                                    AR068314 20 bp 1
Sequence 15 from patent US 5853976.
AR068314

    .20
    /organism="unidentified"
    /mol_type="unassigned DNA"
    /db_xref="taxon:32644"

                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AX815621 22. bp
Sequence 7 from Patent WO03066892.
AX815621
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1731 CCTTABATACTGTGATTCCA 1750
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   817 TGTCTACCTTTCCAGAAGC 836
                                                                                                                                                                       817 TGTCTACCTTTCCAGAAGC 836
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1 TGTCTACCATTCCAGAAAGC 20
                                                                                                                                                                                             1 TGTCTACCATTCCAGAAAGC 20
```

```
PAT 08-OCT-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            PAT 08-OCT-2004
Eukaryota, Metazoa, Chordata, Craniata, Vertebrata, Euteleostomi, Mammalia, Eutheria, Cetartiodactyla, Suina, Suidae, Sus.
1 (Basea 1 to 20.
1 (Basea 1 to 20.
1 Rebic, A., Andersson, L. and Ellegren, H.
Robic, A., Andersson, L. and Ellegren, H.
Expansion of the pig comparative map by expressed sequence tags Unpublished
                                                                                                                         2 (bases 1 to 20)
Fridolfsson, A.K.
Direct Submission
Submitted (27-JUL-1997) Fridolfsson A.K., Animal Breeding and Genetics, Swedish University of Agricultural Sciences, Blomedical 3'UTR.
                                                                                                                                                                                                                                                                                                                                                                                    Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Gaps
                                                                                                                                                                                                                                                                                                                                                                                    ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1 (bases 1 to 20)
Zsebo,K.M., Bosselman,R.A., Suggs,S.V. and Martin,F.H.
Method of preparing human stem cell factor polypeptide
Patent: US 6759215-A 32 06-UUL-2004;
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1 (bases 1 to 20)
Zsebo,K.M., Bosselman,R.A., Suggs,S.V. and Martin,F.H.
Method of preparing human stem cell factor polypeptide
Patent: Vocation/Qualifiers
                                                                                                                                                                                                                                                                                                                                                Query Match 0.4%; Score 18; DB 1; Length 20; Best Local Similarity 100.0%; Pred. No. 59; Matches 18; Conservative 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Query Match 0.4%; Score 18; DB 1; Length 20; Best Local Similarity 100.0%; Pred. No. 59; Matches 18; Conservative 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Sequence 32 from patent US 6759215. ARS62156. G1:53976019
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   20 bp 1
Sequence 34 from patent US 6759215.
AR562158
AR562158.1 GI:53976021
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           /organism="unknown"
/mol_type="genomic DNA"

    .20
    /organism="Sus scrofa"
/mol_type="mRNA"
    /db_xref="taxon:9823"

                                                                                                                                                                                                                                                     Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              5025 AAAAAAAAAAAAAAA 5042
                                                                                                                                                                                                                                                                                                                                                                                                                    9 CGGGCTGCAGGAATTCGG 26
                                                                                                                                                                                                                                                                                                                                                                                                                                       1 CGGGCTGCAGGAATTCGG 18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Unclassified.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Unclassified.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Unknown.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Unknown.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Unknown
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Unknown.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            18
                                                                                                                                                                                                                                                                      Bource
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            RESULT 45
AR562158/c
LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    RESULT 44
AR562156/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ORGANISM
                                                                                                                                     REFERENCE
AUTHORS
TITLE
JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               JOURNAL
FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AUTHORS
TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ACCESSION
VERSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AUTHORS
TITLE
JOURNAL
FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ACCESSION
VERSION
                                          REFERENCE
                                                                                                                        JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            KEYWORDS
                                                                                                                                                                                                                                                     FEATURES
                                                                                        TITLE
                                                                                                                                                                                                                                    COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                 g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            a
a
                                                                                                                                                                                                                                                                                                                                                                                                                    à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ઠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ö
                                                                                        PAT 09-DEC-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   PAT 08-OCT-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            MAM 29-JUL-1997
                                                                                                                                                                                                  Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1 (Dases 1 to 19)
Brown, S.M., Elich, T.D., Heck, G.R., Kishore, G.M., Logusch, E.W.,
Logusch, S.J., Piller, K.J., Rao, S., Ream, J.E. and Baerson, S.R.
Methods for controlling gibberellin levels
Patent: US 6723897-A 85 20-APR-2004;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Gaps
                                                                                                                                                                                                                                                                 Polymorphisms in the human gene for tpmt and their use in diagnostic and therapeutic applications Patent: WO 03066892-A 8 14-AUG-2003; Epidauros Biotechnologia AG (DE) Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ö
                                                                                                                                                                                                                                                                                                                                                                                                                                     DB 1; Length 22;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              DB 1; Length 19;
                                                                                         linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              mRNA
                                                                                         DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            0.4%; Score 18.2; D
94.7%; Pred. No. 56;
tive 1; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                  Query Match
0.4%; Score 18.4; D
Best Local Similarity 95.0%; Pred. No. 55;
Matches 19; Conservative 0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Sequence 85 from patent US 6723897.
AR528447
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           SSAJ777
Sus scrofa EST GITR forward primer.
AJ000777
                                                                                                                                                                                                                                                                                                                                                                   /organism="Homo sapiens"
/mol_type="unassigned DNA"
/db_xref="taxon:9606"
                                                                                        22 bp
Sequence 8 from Patent WO03066892.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1. .19
/organism="unknown"
/mol_type="genomic DNA"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   13
                                                                                                                                                                                                                                                   Schwab, M. and Schaeffeler, E.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1731 CCTTAAATACTGTGATTCCA 1750
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            5024 TAAAAAAAAAAAAA 5042
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ccrraaaracrerecreca 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           19 BAAAAAAAAAAAAA 1
                                                                                                                                  AX815622.1 GI:39646319
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AR528447.1 GI:53916512
        22 CCTTAAATACTGTGGTTCCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AJ000777.1 GI:2286000
                                                                                                                                                                    Homo sapiens (human)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Query Match
Best Local Similarity 94.7
Matches 18; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         PCR primer.
Sus scrofa (pig)
Sus scrofa
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Unclassified.
                                                                                                                                                                                      Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AR528447
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Unknown
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Unknown
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      DECENTION
ACCESSION
VERSION
KEYWORDS
SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            DEFINITION
ACCESSION
VERSION
KEYWORDS
SOURCE
ORGANISM
                                                      RESULT 41
AX815622
LOCUS
DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 source
                                                                                                                                                                                     ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AR528447/c
LOCUS
                                                                                                                   ACCESSION
VERSION
KEYWORDS
SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          RESULT 43
SSAJ777
LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               REFERENCE
AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TITLE
JOURNAL
                                                                                                                                                                                                                                                     AUTHORS
                                                                                                                                                                                                                                                                                                   JOURNAL
                                                                                                                                                                                                                                    REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   RESULT 42
                                                                                                                                                                                                                                                                                                                                   FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              FEATURES
                                                                                                                                                                                                                                                                    TITLE
```

ઠે 셤 ö

ð

```
Unclassified.
1 (Dases 1 to 17)
Alnemri,E.S., Fernandes-Alnemri,T. and Litwack,G.
Apoptotic protease Mch6, nucleic acids encoding same and methods of
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  PAT 17-0CT-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                            PAT 29-SEP-1999
                      PAT 26-SEP-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1 (bases 1 to 17)
Alneming E.S., Fernandes-Alneming T., Litwack, G., Armstrong, R. and Tomaselli, K.
MCH4 and MCH5, apoptotic proteases
Patent: US 5861815-A 6 22-DEC-1998;
Location/Qualifiers
                                                                                                                                                    Dubertret, B., Calame, M. and Libchaber, A.
Methods employing fluorescence quenching by metal surfaces
Patent: WO 0218951-4 07-MAR-2002;
THE ROCKEPELLER UNIVERSITY (US)
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ;
0
                                                                                                                                                                                                                                                                                                                                .,
                                                                                                                                                                                                                                                                                                   Length 21;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Length 17;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       0; Indels
                                                                                                                                                                                                                                                                                                                                1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                               linear
                          linear
                                                                                                                                                                                                                                                                                                       DB 1;
                                                                                                                                                                                                                                    1. .21
/organism="synthetic construct"
/mol type="unassigned DNA"
/db_xref="taxon:32630"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Query Match 0.3%; Score 17; DB 1; Best Local Similarity 100.0%; Pred. No. 71; Matches 17; Conservative 0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  DNA
                             DNA
                                                                                                                             other sequences; artificial sequences.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1. 17
/organism="unknown"
/mol_type="unassigned DNA"
                                                                                                                                                                                                                                                                                                   ch 0.3%; Score 17.4; I Similarity 94.7%; Pred. No. 67; 18; Conservative 0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AR164207
Sequence 5 from patent US 6271361.
AR164207
AR164207.1 GI:16235230
                                                                                                                                                                                                                                                                                                                                                                                                                                                               AR067856 17 bp
Sequence 6 from patent US 5851815.
AR067856
                      21 bp
Sequence 4 from Patent W00218951.
                                                                                                                                                                                                                                                                                                                                                              5050 AAAAAAAAAAAAAACTCG 5068
                                                                                                                                                                                                                                                                                                                                                                                        2 AAAAAAAAAAAAAACTCG 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1 CAGGAATTCGGCACGAG 17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       16 CAGGAATTCGGCACGAG 32
                                                                    AX498248.1 GI:23343167
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AR067856.1 GI:5999078
                                                                                                     synthetic construct
synthetic construct
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Unknown.
Unclassified.
                                                                                                                                                                                                                                                                                                            Query Match
Best Local Similarity
Matches 18; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Unknown.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Unknown.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              LOCUS
DEFINITION
ACCESSION
VERSION
KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           source
                                          DEFINITION
ACCESSION
VERSION
KEYWORDS
SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AUTHORS
TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               RESULT 50
AR164207
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              REPERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     REFERENCE
AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ACCESSION
VERSION
                                                                                                                                                                             TITLE
JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                        RESULT 49
AR067856
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               JOURNAL
                                                                                                                                               REFERENCE
AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            KEYWORDS
SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             FEATURES
                  AX498248
LOCUS
                                                                                                                                                                                                                       FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      d
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             8
                                                                                                                                                                                                                                                                                                                                                                      ð
                                                                                                                                                                                                                                                                                                                                                                                                g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     PAT 15-MAY-2001
                                                                              ö
                                                                                                                                                                                                             PAT 18-FEB-2000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Homo sapiens
Homo sapiens
Eukaryota, Metazoa, Chordata, Craniata, Vertebrata, Euteleostomi,
Mammalia, Eutheria, Primates, Catarrhini, Hominidae, Homo.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Robbins, J.M. and Tritz, R. Ribozyme therapy for the treatment of proliferative skin and eye diseases
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Gaps
                                                                               Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         .;
0
                                                                                 ..
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            DB 1; Length 19;
                                                                                                                                                                                                                                                                                                                                                                                                                                                             Length 19;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Indels
                                                 Query Match
0.4%; Score 18; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 59;
Matches 18; Conservative 0; Mismatches 0; Indels
                                                                                                                                                                                                                linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1. .19
/organism="Homo sapiens"
/mol_type="unassigned DNA"
/db_xref="taxon:9606"
/noTe="Cdk-we-hu ribozyme binding site"
                                                                                                                                                                                                                                                                                                                                                                                                                                                            0.3%; Score 17.4; DB 1;
94.7%; Pred. No. 66;
tive 0; Mismatches 1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Patent: WO 0130362-A 1273 03-MAY-2001;
IMMUSOL, INC. (US)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AX130055
Sequence 1273 from Patent WO0130362.
AX130055
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Query Match 0.3%; Score 17.4; D
Best Local Similarity 94.7%; Pred. No. 66;
Matches 18; Conservative 0; Mismatches
                                                                                                                                                                                                                                                                                                                                               Chang, H.
Cerebellum-derived growth factors
Patent: US 5912326-A 15 15-UUN-1999,
Location/Qualifiers
                                                                                                                                                                                                                    Sequence 15 from patent US 5912326.
                                                                                                                                                                                                                                                                                                                                                                                                         1. .19
/organism="unknown"
/mol_type="unassigned DNA"
1. .20
/organism="unknown"
/mol_type="genomic DNA"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 INC. (US)
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     5025 AAAAAAAAAAAAAAA 5042
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      19 GAATTCGGCACGAGGGAG 37
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1 GAATTCGGCACGAGGCAG 19
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AX130055.1 GI:14136360
                                                                                                                                      18 AAAAAAAAAAAAAAA 1
                                                                                                                                                                                                                                                              AR072061.1 GI:7222949
                                                                                                                                                                                                                                                                                                       Unknown.
Unclassified.
1 (bases 1 to 19)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             18; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Query Match
Best Local Similarity
Matches 18; Conserv
                                                                                                                                                                                                                                                                                            Unknown.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          DEFINITION
ACCESSION
VERSION
KEYWORDS
SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 RESULT 47
AX130055/c
LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                              source
    source
                                                                                                                                                                                                                                  DEFINITION
                                                                                                                                                                                                                                                                                            SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                 TITLE
JOURNAL
FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AUTHORS
TITLE
                                                                                                                                                                                                                                                                                                                                      REFERENCE
AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      JOURNAL
                                                                                                                                                                                         RESULT 46
AR072061
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               REFERENCE
                                                                                                                                                                                                                                                               VERSION
KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        g
                                                                                                                                            g
```

Gaps

ö

Gaps

gibbs-10-667-022-4.rge

```
Unclassified.
1 (Dases I to 17)
Alnemri, E.S., Fernandes-Alnemri, T. and Litwack, G.
Apoptotic protease Mch6, nucleic acids encoding same and methods of
                                                  PAT 20-DEC-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       PAT 20-DEC-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           PAT 17-AUG-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Unclassified.
1 (bases 1 to 17)
Alnemri, S., Fernandes-Alnemri, T., Litwack, G., Armstrong, R. and
Tomaselli, K.
                                                                                                                                                                                                                                                                                                                                                            Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Mch3, a novel apoptotic protease, nucleic acids encoding and methods of use Patent: US 6462175-A 6 08-OCT-2002;
                                                                                                                                                                                                                                                                                                                                                            ô
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       linear
                                                                                                                                                                                                                                                                                                                            Query Match 0.3%; Score 17; DB 1; Length 17; Best Local Similarity 100.0%; Pred. No. 71; Matches 17; Conservative 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          linear
                                                  linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1; Length 17;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Unknown.
Unclassified.
1 (bases 1 to 17)
Alnemri,E.S., Fernandes-Alnemri,T. and Litwack,G.
                                                  mRNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       DNA
                                                                                                                                                                                                                                  Patent: US 6455296-A 5 24-SEP-2002;
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Query Match

0.3%; Score 17; DB
Best Local Similarity 100.0%; Pred. No. 71;
Matches 17; Conservative 0; Mismatches
                                              17 bp
Sequence 5 from patent US 6455296.
AR232188
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AR236040 17 bp
Sequence 6 from patent US 6462175.
AR236040
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AŘ137628
Seguence 5 from patent US 6566505.
AR337628
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   /organism="unknown"
/mol_type="genomic DNA"
                                                                                                                                                                                                                                                                               /organism="unknown"
/mol_type="mRNA"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AR337628.1 GI:33724059
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AR236040.1 GI:27279634
                                                                                            AR232188.1 GI:27274091
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1 CAGGAATTCGGCACGAG 17
                                                                                                                                                                                                                                                                                                                                                                                           16 CAGGAATTCGGCACGAG 32
                                                                                                                                                                                                                                                                                                                                                                                                                        1 cassaarrcsscacsas 17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 16 CAGGAATTCGGCACGAG 32
                                                                                                                         Unknown.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Unknown.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Unknown.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Unknown.
                                             LOCUS
DEFINITION
ACCESSION
VERSION
KEYWORDS
SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     DEFINITION
ACCESSION
VERSION
KEYWORDS
SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    DEFINITION
ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ORGANISM
                                                                                                                                                                                                                                  JOURNAL
FEATURES
                                                                                                                                                                    REFERENCE
AUTHORS
TITLE
                 RESULT 53
AR232188
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           RESULT 55
AR337628
LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   REFERENCE
AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        RESULT 54
AR236040
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                VERSION
KEYWORDS
SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TITLE
                                                                                                                                                                                                                                                                                                                                                                                             ઠ
                                                                                                                                                                                                                                                                                                                                                                                                                   g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         a
                                                                                                                                                                                                                                                                                                                                                                        Unclassified.
1 (bases 1 to 17)
Alnemri,E.S., Fernandes-Alnemri,T. and Litwack,G.
Apoptotic protease Mch6, nucleic acids encoding same and methods of
                                                                                                                            ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ö
                                                                                                                                                                                                                                                                PAT 17-0CT-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           PAT 17-DEC-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1 (bases 1 to 17)
Alnemri,E.S., Fernandes-Alnemri,T., Litwack,G., Armstrong,R. and
Tomaselli,K.
With and Mch5, apoptotic protease, nucleic acids encoding and
methods of use
Patent: US 6287795-A 6 11-SEP-2001;
Location/Qualifiers
                                                                                                                            Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Gaps
                                                                                                                            ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Query Match 0.3%; Score 17; DB 1; Length 17; Best Local Similarity 100.0%; Pred. No. 71; Matches 17; Conservative 0; Mismatches 0; Indels
                                                                                          Query Match 0.3%; Score 17; DB 1; Length 17; Best Local Similarity 100.0%; Pred. No. 71; Matches 17; Conservative 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                  linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Length 17;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Query Match 0.3%; Score 17; DB 1;
Best Local Similarity 100.0%; Pred. No. 71;
Matches 17; Conservative 0; Mismatches (
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           DNA
Patent: US 6271361-A 5 07-AUG-2001;
Location/Qualifiers
1 .17
                                           /organism="unknown"
/mol_type="unassigned DNA"

    .17
    /organism="unknown"
    /mol_type="unassigned DNA"

                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1. .17
/organism="unknown"
/mol_type="unassigned DNA"
                                                                                                                                                                                                                                                                                                                                                                                                                                                  Patent: US 6274318-A 5 14-AUG-2001;
Location/Qualifiers
                                                                                                                                                                                                                                                               AR164645
Sequence 5 from patent US 6274318.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Sequence 6 from patent US 6287795.
                                                                                                                                                                                                                                                                                               AR164645
AR164645.1 GI:16237730
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AR168088.1 GI:17903908
                                                                                                                                                                           1 CAGGAATTCGGCACGAG 17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1 CAGGAATTCGGCACGAG 17
                                                                                                                                                      16 CAGGAATTCGGCACGAG 32
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             16 CAGGAATTCGGCACGAG 32
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    16 CAGGAATTCGGCACGAG 32
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1 cassaarrcsscacsas 17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Unclassified.
                                                                                                                                                                                                                                                                                                                                            Unknown.
                                                                                                                                                                                                                                                                                                                                                            Unknown.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Unknown.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Unknown
                                 Bource
                                                                                                                                                                                                                                              AR164645
LOCUS
DEFINITION
ACCESSION
VERSION
KEYWORDS
SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AR16808
LOCUS
DEFINITION
ACCESSION
VERSION
KEYWORDS
SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Bource
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Bource
JOURNAL
FEATURES
                                                                                                                                                                                                                                                                                                                                                           ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                      REFERENCE
AUTHORS
TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               REFERENCE
AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                     JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           JOURNAL
                                                                                                                                                                                                                                RESULT 51
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         RESULT 52
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ઠે
```

ö

source

FEATURES

TITLE JOURNAL

```
Unknown.
Unclassified.
Unclassified.
Unclassified.
I (bases 1 to 20)
Frank, G.R., Hunter, S.Wu. and Wallenfels, L.
Ectoparasite saliva proteins and apparatus to collect such proteins
Ectoparasite saliva proteins and apparatus to collect such proteins
Patent: US 5795862-A 23 18-AUG-1998;
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           J. (bases 1 to 20)
Frank, G.R., Hunter, S.Wu. and Wallenfels, L.
Ectoparasite saliva proteins and apparatus to collect such proteins
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         PAT 29-SEP-1999
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  PAT 05-DEC-1998
                                                                           PAT 08-OCT-2004
                                                                                                                                                                                                                 In (bases 1 to 17)
Alnemri, E.S., Fernandes-Alnemri, T., Litwack, G., Armstrong, R. and Tomaselli, K.
Antibody that specifically binds an Mch4 polypeptide
Patent: US 6730779-A 6 04-MAY-2004;
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                   Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ö
                                                                                                                                                                                                                                                                                                                                                                                                                   ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Query Match

0.3%; Score 17; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 72;
Matches 17; Conservative 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                  0.3%; Score 17; DB 1; Length 17;
100.0%; Pred. No. 71;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      linear
                                                                               linear
                                                                                                                                                                                                                                                                                                                                                                                                                 Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       DNA
                                                                                 DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     20 bp I Sequence 23 from patent US 5840695.

    .20
    /organism="unknown"
    /mol_type="unassigned DNA"

                                                                                                                                                                                                                                                                                                                                                                                                     100.0%; Pred. No. 71;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AR024174 20 bp 1
Sequence 23 from patent US 5795862.
AR024174
                                                                             AR533532 17 bp
Sequence 6 from patent US 6730779.
AR533532
AR533532.1 GI:53923390
                                                                                                                                                                                                                                                                                                                         1. .17
/organism="unknown"
/mol_type="genomic DNA"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            5069 AGGGGGGCCCGGTACC 5085
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AR060565.1 GI:5987015
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1 CAGGAATTCGGCACGAG 17
                                                                                                                                                                                                                                                                                                                                                                                                                                                      16 CAGGAATTCGGCACGAG 32
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AR024174.1 GI:3977468
1 CAGGAATTCGGCACGAG 17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               20 AGGGGGGCCCGGTACC
                                                                                                                                                                                                                                                                                                                                                                                                                       17; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Unclassified.
                                                                                                                                                                                                                                                                                                                                                                                         Query Match
Best Local Similarity
Matches 17; Conserva
                                                                                                                                                                                       Unknown.
Unclassified.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Unknown.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Unknown.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Unknown
                                                                                                                                                                     Unknown.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   KEYWORDS
SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         DEFINITION
ACCESSION
VERSION
KEYWORDS
SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                RESULT 60
AR060565/c
                                                                                                                                                                                                                                                                                                                           source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  REFERENCE
AUTHORS
TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ORGANISM
                                                                                                  DEFINITION
ACCESSION
VERSION
KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AR024174/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AUTHORS
TITLE
JOURNAL
FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ACCESSION
VERSION
                                                                                                                                                                       SOURCE
ORGANISM
                                                                                                                                                                                                                                                                      TITLE
JOURNAL
FEATURES
                                                                                                                                                                                                                     REFERENCE
AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             REFERENCE
                                                    RESULT 58
AR533532
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             RESULT 59
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 g
                                                                                                                                                                                                                                                                                                                                                                                                                                                              ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          요
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ô
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  PAT 15-MAY-2004
                                                                                                                                                                                                                                                                                                             PAT 20-FEB-2004
                                                                                                                                                         ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Unclassified.
Unclassified.

(bases 1 to 17)

Alnemri,E.S., Fernandes-Alnemri,T., Litwack,G., Armstrong,R. and Tomselli,K.

Mch3, a novel apoptotic protease, nucleic acids encoding and methods of use

Patent: US 6716960-A 6 06-APR-2004;

Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                     Unclassified.
1 (bases 1 to 17)
Alnemri, B.S., Fernandes-Alnemri, T., Litwack, G., Armstrong, R. and
Tomaselli, K.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Gaps
                                                                                                                                                            Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Mchalle and more apoptotic protease, nucleic acids encoding and methods of use patent: US 6686459-A 6 03-FEB-2004; Iocation/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ;
0
                                                                                                                                                            ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Query Match 0.3%; Score 17; DB 1; Length 17; Best Local Similarity 100.0%; Pred. No. 71; Matches 17; Conservative 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Query Match
0.3%; Score 17; DB 1; Length 17;
Best Local Similarity 100.0%; Pred. No. 71;
Matches 17; Conservative 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     linear
                                                                                                                         Query Match 0.3%; Score 17; DB 1; Length 17; Best Local Similarity 100.0%; Pred. No. 71; Matches 17; Conservative 0; Mismatches 0; Indels
          Antibodies to Mch6 polypeptides
Patent: US 6566505-A 5 20-MAY-2003;
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AR492475 17 bp
Sequence 6 from patent US 6716960.
AR492475.1 GI:47261885
                                                                                                                                                                                                                                                                                                 17 bp
Sequence 6 from patent US 6686459.
AR473351

    .17
    /organism="unknown"
    /mol_type="genomic DNA"

                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                /organism="unknown"
/mol_type="genomic DNA"
                                                               1. .17
/organism="unknown"
/mol_type="mRNA"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           16 CAGGAATTCGGCACGAG 32
                                                                                                                                                                                                                                                                                                                                                                  AR473351.1 GI:42708800
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1 CAGGAATTCGGCACGAG 17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      16 CAGGAATTCGGCACGAG 32
                                                                                                                                                                                                                       1 CAGGAATTCGGCACGAG 17
                                                                                                                                                                                              16 CAGGAATTCGGCACGAG 32
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Unknown.
                                                                                                                                                                                                                                                                                                                                                                                                     Unknown.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       RESULT 57
AR492475
LOCUS
DEFINITION
ACCESSION
                                                                                                                                                                                                                                                                                                                  LOCUS
DEFINITION
ACCESSION
VERSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         source
```

ö

ORGANISM REFERENCE AUTHORS

JOURNAL

TITLE

FEATURES

KEYWORDS SOURCE

RESULT 56 AR473351

ð g ö

SOURCE ORGANISM

VERSION KEYWORDS

g ò

AUTHORS REFERENCE

TITLE

JOURNAL

FEATURES

PAT 16-JUN-2001

ö

Gaps

ô

LOCUS
DEFINITION
ACCESSION
VERSION
KEYWORDS
SOURCE
ORGANISM

RESULT 61 IS4907/c

8,6

source

JOURNAL FEATURES

REFERENCE AUTHORS TITLE

RESULT 62 AR370189/c

ò g DEFINITION

ACCESSION VERSION KEYWORDS

ORGANISM

REFERENCE AUTHORS

TITLE

JOURNAL

FEATURES

```
1 (bases 1 to 20)
Li,L. and Hood,L.
Human jagged polypeptide, encoding nucleic acids and methods of use
Patent: US 6136552-A 44 24-OCT-2000;
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                E60050

20 bp DNA linear PAT 09-JAN-2004 Gene encoding 1,5-anhydroglucitol dehydrogenase, recombinant vector containing said gene, transformant containing said recombinant vector, and recombinant 1,5-anhydroglucitol dehydrogenase protein
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          KIMI KANETANI, MAKOTO MIYOSHI, HIROYUKI EBINUMA, ATSUO MORI, PI
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       KOJI USHIZAWA
PC C12N9/04,C12N1/15,C12N1/19,C12N1/21,C12N5/10,C12N15/09,
C12NS/00,C12N15/00
CC CC
FH Key Location/Qualifiers
1 .20
FT source / Organism='Artificial Sequence'.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ce 1. 20 /organism='Artificial Sequence' Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Query Match 0.3%; Score 16.8; DB 1; Length 20; Best Local Similarity 90.0%; Pred. No. 75; Matches 18; Conservative 0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                  DB 1; Length 20;
                 linear
                                                                                                                                                                                                                                                                                                                                   2; Indels

    .20
    /organism="synthetic construct"

                 DNA
          20 bp I
Sequence 44 from patent US 6136952.
AR136554
                                                                                                                                                                                                                                                                                                Query Match 0.3%; Score 16.8; I
Best Local Similarity 90.0%; Pred. No. 75;
Matches 18; Conservative 0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          /mol_type="unassigned DNA"
/db_xref="taxon:32630"
                                                                                                                                                                                                                                                                 /mol_type="unassigned DNA"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    obtained from said transformant
                                                                                                                                                                                                                                1. .20
/organism="unknown"
                                                                                                                                                                                                                                                                                                                                                                  622 TATTTTCAGATATTCATGA 641
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           587 GCATTGCTCCCTCCCAGATC 606
                                                                                                                                                                                                                                                                                                                                                                                     1 TATTTTTAGATATTAATGA 20
                                                              AR136554.1 GI:14477226
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     E60050.1 GI:18622791
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 JP 2000316570-A/20.
synthetic construct
synthetic construct
                                                                                                                                Unclassified.
                                                                                               Unknown.
                                                                                                                  Unknown.
                                                                                                                                                                                                                                  source
                                              ACCESSION
VERSION
KEYWORDS
SOURCE
ORGANISM
                 LOCUS
                                                                                                                                                             AUTHORS
TITLE
JOURNAL
FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                   RESULT 64
E60050
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ACCESSION
VERSION
KEYWORDS
SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AUTHORS
TITLE
                                                                                                                                             REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     REFERENCE
AR136554
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        COMMENT
                                                                                                                                                                                                                                                                                                                                                                    ઠ
                                                                                                                                                                                                                                                                                                                                                                                                 셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                 1 (bases 1 to 20)
Frank,G.R., Hunter,S.Wu. and Wallenfels,L.
Ectoparasite saliva proteins and apparatus to collect such proteins
Patent: US 5646115-A 23 08-UUL-1997;
Location/Qualifiers
                                                                                                                                ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ö
                                                                                                                                                                                                                                                                                   PAT 07-0CT-1997
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      PAT 12-SEP-2003
                                                                                                                                Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1 (bases 1 to 20)
Monia, B.P. and Cowsert, L.M.
Antisense inhibition of telomeric repeat binding factor 2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ö
                                                                                                                                ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Length 20;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Length 20;
                                                                                               Length 20
                                                                                                                                                                                                                                                                                   linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          0; Indels
                                                                                                                                0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Query Match 0.3%; Score 17; DB 1; Best Local Similarity 100.0%; Pred. No. 72; Matches 17; Conservative 0; Mismatches
                                                                                             0.3%; Score 17; DB 1;
100.0%; Pred. No. 72;
tive 0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       0.3%; Score 17; DB 1;
100.0%; Pred. No. 72;
ve 0; Mismatches
                                                                                                                                                                                                                                                                                   DNA
Patent: US 5840695-A 23 24-NOV-1998;
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               20 bp | Sequence 10 from patent US 6300132. AR370189 AR370189.1 GI:34606695
                                                                                                                                                                                                                                                                          20 bp
Sequence 23 from patent US 5646115.
154907.
154907.1 GI:2476110
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          expression
Patent: US 6300132-A 10 09-OCT-2001;
                                              /organism="unknown"
/mol_type="unassigned DNA"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    /organism="unknown"
/mol_type="unassigned DNA"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1. .20
/organism="unknown"
/mol_type="genomic DNA"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Query Match 0.3%; Sco
Best Local Similarity 100.0%; Pr
Matches 17; Conservative 0;
                                                                                                                                                                5069 AGGGGGGCCCCGGTACC 5085
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    5069 AGGGGGGCCCGGTACC 5085
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           18 GGAATTCGGCACGAGGG 34
                                                                                                                                                                                  20 AGGGGGGCCCGGTACC 4
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       20 AGGGGGGCCCGGTACC 4
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Best Local Similarity 100.
Matches 17; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                 Unclassified.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Unclassified.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Unknown.
                                                                                                                                                                                                                                                                                                                                                                  Unknown
                                                                                                                                                                                                                                                                                                                                                                                   Unknown
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Unknown
                                                                                               Query Match
```

ö

Gaps

ö

source

63

RESULT

ઠે 셤

JOURNAL

FEATURES

```
(bases 1 to 22)
                                                                                                                                                                                                                                                                                                                                                                                                                                  Unclassified.
                                       Unclassified.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                             Baum, J.A.
                                                                                                                                                                                                                                                                                                                                                                                                       Unknown.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Unknown.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Unknown
                          Unknown
                                                                                                                                                                                                                                                                                                                                                                                                                        Unknown
                                                                                                                                                                                                                                                                                                                                                   DEFINITION
ACCESSION
VERSION
KEYWORDS
                                                                                                                                      source
              SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                       ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AUTHORS
TITLE
JOURNAL
FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ACCESSION
VERSION
KEYWORDS
SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          RESULT 69
AR177993
                                                    REFERENCE
AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        JOURNAL
                                                                                                          JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                  REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                AUTHORS
                                                                                                                                                                                                                                                                                                                          AR126177
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    FEATURES
KEYWORDS
                                                                                                                      FEATURES
                                                                               TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TITLE
                                                                                                                                                                                                                                                                                                                RESULT
                                                                                                                                                                                                                                                                                                                                                                                                            SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      LOCUS
                                                                                                                                                                                                                                                                                                                                           LOCUS
                                                                                                                                                                                                                                               ò
                                                                                                                                                                                                                                                                       g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Nucleic acid amplification primers for pcr-based clonality studies Patent: WO 2004033728-A 61 22-APR-2004;
Erasmus Universiteit Rotterdam (NL); Van Dongen, Jacobus, Johannes,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         PAT 16-MAY-2001
                                                                                                                                                                                                                                                                                                                            ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                   PAT 05-MAY-2004
                                                                     PAT 14-MAY-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      van Dongen,J.J., Langerak,A.W., Schuuring,E.M., san Miquel,J.F., garzia Sanz,R., Parreira,A., Smith,J.L., Lavender,F.L., Morgan,G.J., Evans,P.A., Kneba,M., Hummel,M., Macintyre,E.A. and
                                                                                                                                                                                                                                                                                                                               Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              /organism="synthetic construct"
Mol_type="unaasigned DNA"
/db xref="taxon:32650"
/noTe="bescription of Artificial Sequence: V beta 7
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ö
                                                                                                                                                                                                                                                                                                                               ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Length 21;
                                                                                                                                                                                                                                                                                                    DB 1; Length 20;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             linear
                                                                      linear
                                                                                                                                                                                                                                                                                                                              2; Indels
                                                                                                                                                                              [Li,L., Hood,L., Krantz,I.D. and Spinner,N.B. Li,L., Hood,L., Krantz,I.D. and Spinner,N.B. Methods of diagnosing alagille syndrome Patent: US 6703198-A 44 09-MAR-2004; Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             0.3%; Score 16.8; DB 1;
90.0%; Pred. No. 75;
cive 0; Mismatches 2;
                                                                      mRNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                            CQ801070 21 bp DNA
Sequence 61 from Patent WO2004033728.
CQ801070
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  other sequences; artificial sequences.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        22 bp 1 Sequence 52 from patent US 6153814. AR120179 AR120179.1 GI:14102878
                                                                                                                                                                                                                                                                                                                 Pred. No. 75;
0; Mismatches
                                                                     AR482351 20 bp r
Sequence 44 from patent US 6703198.
AR482351
                                                                                                                                                                                                                                                                                                   Query Match 0.3%; Score 16.8; 1
Best Local Similarity 90.0%; Pred. No. 75;
Matches 18; Conservative 0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Location/Qualifiers
                                                                                                                                                                                                                                                1. .20
/organism="unknown"
/mol_type="mRNA"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   4032 GCTCTGCATTGGTACAAGCA 4051
                                                                                                                                                                                                                                                                                                                                                          622 TATTTTCAGATATTCATGA 641
                                                                                                                                                                                                                                                                                                                                                                        GCATTGCTCCCTTCAAGATC 20
                                                                                                            AR482351.1 GI:47244672
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CQ801070.1 GI:47057842
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      synthetic construct synthetic construct
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        18; Conservative
                                                                                                                                                                    Unclassified.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Query Match
Best Local Similarity
Matches 18; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Bastard, C.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Maria (NL)
                                                                                                                                         Unknown.
                                                                                                                                                       Unknown
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       DEFINITION
ACCESSION
VERSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                DEFINITION
                                                                                DEFINITION
ACCESSION
VERSION
KEYWORDS
                                                                                                                                                                                                                                                    source
                                                                                                                                         SOURCE
ORGANISM
                                                                                                                                                                                                        TITLE
JOURNAL
FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               REFERENCE
AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TITLE
JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     RESULT 67
AR120179
                                                                                                                                                                               REFERENCE
AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                             RESULT 66
                                                                                                                                                                                                                                                                                                                                                                                                                                        CQ801070
LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               VERSION
KEYWORDS
                                                          AR482351
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      FEATURES
                                              RESULT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ઠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           셤
                                                                                                                                                                                                                                                                                                                                                            8
                                                                                                                                                                                                                                                                                                                                                                                  원
```

```
ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            PAT 17-DEC-2001
                                                                                                                                                                                                                                   ö
                                                                                                                                                                                                                                                                                                                                                                                                          PAT 16-MAY-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Lepidopteran-toxic polypeptide and polynucleotide compositions and methods for making and uaing same Patent: US 6177615-A 52 23-JAN-2001; Location/Qualifiers
Theorem 1 to 22)
Baum, J.A., Gilmer, A. Jelen. and Mettus, A.-M. Light.
Bolypeptide compositions toxic to lepidopteran insects and methods for making same
for making same
Location/Qualifiers
                                                                                                                                                                                                                                   Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Gaps
                                                                                                                                                                                                                                   ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         0.3%; Score 16.8; DB 1; Length 22; 90.0%; Pred. No. 75;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Length 22;
                                                                                                                                                                                               Length 22;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Indels
                                                                                                                                                                                                                                   Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Unclassified.
Unclassified.
1 (bases 1 to 22)
Baum,J.A., Gilmer.A.Jelen. and Mettus,A.-M.Light.
Lepidopteran-resistent transgenic plants
Patent: US 6313378-A 52 06-NOV-2001;
                                                                                                                                                                                                                                   7
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 DB 1;
                                                                                                                                                                                                 DB 1;
                                                                                                                                                                                                                                                                                                                                                                                                                DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Query Match 0.3%; Score 16.8; Dest Local Similarity 90.0%; Pred. No. 75; Matches 18; Conservative 0; Mismatches

    .22
    /organism="unknown"
    /mol_type="unassigned DNA"

                                                                                                                                                                                             Query Match
0.3%; Score 16.8; I
Best Local Similarity 90.0%; Pred. No. 75;
Matches 18; Conservative 0; Mismatches
                                                                                                                                  /organism="unknown"
/wol_type="unassigned DNA"
                                                                                                                                                                                                                                                                                                                                                                                                      22 bp
Sequence 52 from patent US 6177615.
AR126177
AR126177.1 GI:14112239
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 22 bp
Sequence 52 from patent US 6313378.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1. .22
/organism="unknown"
/wol_type="unassigned DNA"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1 GGATCCCCCGGGCTGCAGGA 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1 GGATCCCTCGAGCTGCAGGA 20
                                                                                                                                                                                                                                                                          1 GGATCCCCCGGGCTGCAGGA 20
                                                                                                                                                                                                                                                                                                              1 dearceredaderedada 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AR177993.1 GI:17920348
```

LOCUS

음

```
1. .18
/organism="unidentified"
/mol_type="unassigned DNA"
/mol_type="unassigned DNA"
/db_xref="taxon:32644"
/note="Description of Artificial Sequence: an artificially
synthesized primer se q"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Isogai,T., Sugiyama,T., Otsuki,T., Wakamatsu,A., Sato,H., Ishii,S., Yamamoto,J.I., Isono,Y., Hio,Y., Otsuka,K., Nagai,K., Irie,R., Tamechika,I., Seki,N., Yoshikawa,T., Otsuka,M., Nagahari,K. and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             linear PAT 15-DEC-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ô
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             PAT 20-APR-2002
                                                  other sequences; artificial sequences.

(1) (bases 1 to 22)

(2) (bases 1 to 22)

(3) (bases 1 to 22)

(4) (bases 1 to 22)

(5) (bases 1 to 22)

(6) (bases 1 to 22)

(7) (bases 1 to 22)

(8) (bases 1 to 22)

(8) (bases 1 to 22)

(9) (bases 1 to 22)

(1) (bases 2)

(2) (bases 2)

(3) (bases 2)

(4) (bases 2)

(5) (bases 2)

(6) (bases 2)

(6) (bases 2)

(7) (bases 2)

(8) (bases 2)

(9) (bases 2)

(1) (bases 2)

(1) (bases 2)

(2) (bases 2)

(3) (bases 2)

(4) (bases 2)

(5) (bases 2)

(6) (bases 2)

(7) (bases 2)

(8) (bases 2)

(8) (bases 2)

(9) (bases 2)

(1) (bases 2)

(1) (bases 2)

(2) (bases 2)

(3) (bases 2)

(4) (bases 2)

(5) (bases 2)

(6) (bases 2)

(7) (bases 2)

(8) (bases 2)

(8) (bases 2)

(9) (bases 2)

(1) (bases 2)

(1) (bases 2)

(2) (bases 2)

(3) (bases 2)

(4) (bases 2)

(5) (bases 2)

(6) (bases 2)

(7) (bases 2)

(8) (bases 2)

(8) (bases 2)

(8) (bases 2)

(9) (bases 2)

(1) (bases 2)

(1) (bases 2)

(1) (bases 2)

(2) (bases 2)

(3) (bases 2)

(4) (bases 2)

(5) (bases 2)

(6) (bases 2)

(7) (bases 2)

(8) (bases 2)

(8) (bases 2)

(8) (bases 2)

(9) (bases 2)

(1) (bases 2)

(1) (bases 2)

(1) (bases 2)

(2) (bases 2)

(3) (bases 2)

(4) (bases 2)

(5) (bases 2)

(6) (bases 2)

(7) (bases 2)

(7) (bases 2)

(8) (bases 2)

(8) (bases 2)

(8) (bases 2)

(9) (bases 2)

(9) (bases 2)

(1) (bases 2)

(2) (bases 2)

(3) (bases 2)

(4) (bases 2)

(5) (bases 2)

(6) (bases 2)

(6) (bases 2)

(7) (bases 2)

(8) (bases 
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Gape
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Length 18;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Length 22;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Indela
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ..
7
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    0.3%; Score 16.8; DB 1;
90.0%; Pred. No. 75;
tive 0; Mismatches 2;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ä
                                                                                                                                                                                                                                                                                                                                                                                                                                       1. .22
/organism="synthetic construct"
/mol_type="genomic DNA"
/db_xref="taxon:32630"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Full-length cDNA sequences
Patent: EP 1347046-A 4995 24-SEP-2003;
Research Association for Biotechnology
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       DB
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    18 bp Di
Sequence 4995 from Patent EP1347046.
AX837871
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           19 bp | Sequence 31 from patent US 6326170.
ARI79243
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Score 16.4;
Pred. No. 81;
                                                                                                                                                                                                                                                                                                                                                                                                               Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1 GGATCCCCCGGGCTGCAGGA 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1 GGATCCCTCGAGCTGCAGGA 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               3813 CCATCCTCTACAAGCAG 3830
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AX837871.1 GI:39921563
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            94.48;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1 ccarctraracacad
                          synthetic construct
synthetic construct
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Query Match 0.3
Best Local Similarity 90.0
Matches 18; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    17; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             unidentified
unidentified
unclassified.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Query Match
Best Local Similarity
                       SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                DEFINITION
ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ORGANISM
                                                                                                             AUTHORS
TITLE
JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ACCESSION
VERSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                RESULT 73
AX837871
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              REFERENCE
AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             RESULT 74
AR179243
LOCUS
                                                                                          REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    JOURNAL
  KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                               FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 FEATURES
                                                                                                                                                                                                        COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Locus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             요
                                                                                                                                                                                                      PAT 26-SEP-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ô
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        PAT 27-AUG-2002
ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                PAT 20-JUN-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      22 bp DNA linear PAT 27-AUG DNA linear PAT 27-AUG BD063767.1 GI:22609370
  Gape
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Gaps
  ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          DB 1; Length 22;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Length 22
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Wilson,D.I., Hearn,T. and Walker,M.
Diagnosis and therapy of conditions involving ALMS1
Patent: WO 903407-24 41 24-APR-2003;
UNIVERSITY OF SOUTHAMPTON (GB)
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                       Baum, J.A., Gilmer, A.J. and Mettus, A.-M.L.
Nuclei acid and polypeptide compositions encoding
lepidopteran-toxic polypeptides
Patent: US 6423828-A 52 23-JUL-2002;
Location/Qualifiers
                                                                                                                                                                                                      linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                linear
  2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               DB 1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            /organism="synthetic construct"
/mol_type="unassigned DNA"
/db_xref="taxon:32630"
/noce="pximer"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              synthetic construct
synthetic construct
other sequences; artificial sequences.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     0.3%; Score 16.8; D
90.0%; Pred. No. 75;
tive 0; Mismatches
Mismatches
                                                                                                                                                                                            Sequence 52 from patent US 6423828.
AR220297
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sequence 41 from Patent W003034072.
AX751620
AX751620.1 GI:32133899
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          0.3%; Score 16.8; Diarity 90.0%; Pred. No. 75; Conservative 0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   /mol_type="genomic DNA"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    /organism="unknown"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          3911 CCACTGTGAATGGCTCTCTG 3930
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1 GGATCCCCCGGGCTGCAGGA 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1 GGATCCCTCGAGCTGCAGGA 20
                                                                                      GGATCCCTCGAGCTGCAGGA 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ccrcrerahreccrercre 21
ö
                                                                                                                                                                                                                                                                      AR220297.1 GI:23325058
                                           GGATCCCCCGGGCTGCAGGA
                                                                                                                                                                                                                                                                                                                                                                                       (bases 1 to 22)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  18; Conservative
18; Conservative
                                                                                                                                                                                                                                                                                                                                            Unknown.
Unclassified.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Query Match
Best Local Similarity
Matches 18; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Query Match
Best Local Similarity
Matches 18; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AX751620
                                                                                                                                                                                                                                                                                                                    Unknown.
                                                                                                                                                                                                                    DEFINITION
ACCESSION
VERSION
KEYWORDS
SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      DEFINITION
ACCESSION
VERSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                  REFERENCE
AUTHORS
TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ACCESSION
VERSION
KEYWORDS
SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              REFERENCE
AUTHORS
Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        RESULT 72
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                RESULT 71
AX751620
                                                                                                                                                      RESULT 70
AR220297
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                BD063767
LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 FEATURES
```

ð

```
20 bp
Sequence 29 from Patent WO9925815.
A95627
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   3412 CAGCAAAAGCGGGAGCAG 3429
                                                                                                                                                                                                                                                                                                                                                    3 CAGCAAAAGCAGGAGCAG 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AR215742.1 GI:23313998
                                                                                                                                                                                                                                                                              Query Match 0.3%;
Best Local Similarity 94.4%;
Matches 17; Conservative
                                          A95627.1 GI:6779564
                                                                                    unidentified
unclassified
                                                                        unidentified
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Unknown.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Unknown.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Unknown
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Unknown
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   SOURCE
ORGANISM
                                                                                                                                                                                                               source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ORGANISM
       LOCUS
DEFINITION
ACCESSION
VERSION
KEYWORDS
SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                              DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TITLE
JOURNAL
FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Best Loca
Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ACCESSION
VERSION
KEYWORDS
SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             REFERENCE
AUTHORS
                                                                                     ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          RESULT 78
                                                                                                                                                                                                                                                                                                                                                                                                                   AR215742
LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                           ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                        RESULT 77
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        VERSION
KEYWORDS
                                                                                                                                AUTHORS
                                                                                                                                                                       JOURNAL
                                                                                                                  REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AR429226
                                                                                                                                                                                                  PEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TITLE
                                                                                                                                            TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 g
                                                                                                                                                                                                                                                                                                                                         δ
                                                                                                                                                                                                                                                                                                                                                                셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ö
                                                                                                                                                                                                                                                                                                                             BD078905
Novel prokaryotic polynucleotide and polypeptide and utilization
thereof.
                                                                                                                                                                                                                  ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                PC
C07K14/31,C07K16/12,C12N1/15,C12N1/19,C12N1/21,C12N5/10,C12P21/ PC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              C12Q1/68//(C12N15/09,C12R1:445),C12N15/00,A61K37/02,C12N5/00,(C12N15/00,C12R1:445)
                                                                                                                                                                                                                                                                                                                                                                                                                         unidentified
unidentified
unidentified
unidentified
unclassified.
1 (bases 1 to 19)
Burnham,M.K.R., Lonetto,M.A. and Warren,P.V.
Povel provearyotic polynucleotide and polypeptide and utilization
Patent: JP 201515707-A 21 25-SEP-2001;
SMITHKLINE BEECHAM CORP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             OS Staphylococcus aureus
PN JP 2001515707-A/21
PD 25-SEP-2001
PP 14-SEP-1994 JP 2000510454
PR 12-SEP-1997 US 60/058710
PI MARTIN K R BURNHAM, MICHAEL A LONETTO, PATRICK V WARREN PC CL2N1s/09, A61K38/00, A61K45/00, A61K48/00, A61F31/04, C07H21/02, PC C07H21/04,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Gaps
                                                                Tobases 1 to 19)
Russel Burnham, M.Karl., Lonetto, M.Arthur. and Warren, P. Vernon. Prokaryotic polynucleorides, polypeptides and their uses Patent: US 6336170-A 31 04-DEC-2001;
Location/Qualifiers
                                                                                                                                                                                                                   Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Novel prokaryotic polynucleotide and polypeptide and utilization thereof
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ö
                                                                                                                                                                                                                   ;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     /organism='Staphylococcus aureus'
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               DB 1; Length 19;
                                                                                                                                                                                     Score 16.4; DB 1; Length 19;
Pred. No. 81;
0; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Score 16.4; DE
Pred. No. 81;
0; Mismatches
                                                                                                                                            /organism="unknown"
/wol_type="unassigned DNA"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1. .19
/organism="unidentified"
/mol_type="genomic DNA"
/db_xref="taxon:32644"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       35
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               GGAATTCGGCACGAGCGG 18
                                                                                                                                                                                                                                               18 GGAATTCGGCACGAGGGG 35
                                                                                                                                                                                                                                                                                                                                                                                     BD078905
BD078905.1 GI:22624508
JP 2001515707-A/21.
                                                                                                                                                                                                                                                                 1 GGAATTCGGCACGAGCGG 18
 AR179243.1 GI:20220798
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Query Match 0.3%;
Best Local Similarity 94.4%;
Matches 17; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       GGAATTCGGCACGAGGGG
                                                                                                                                                                                          Query Match
Best Local Similarity 94.4%;
Matches 17; Conservative
                                                                                                                                         1..19
                                                      Unclassified.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            source
                         Unknown
                                            Unknown
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           02,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              표되되
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         222
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    source
                                                                                                                                         source
                                                                                                                                                                                                                                                                                                                                                                                                                             SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                              LOCUS
DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AUTHORS
TITLE
JOURNAL
                                          ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                    ACCESSION
VERSION
KEYWORDS
                                                                                AUTHORS
TITLE
JOURNAL
FEATURES
                                                                                                                                                                                                                                                                                                                   RESULT 75
BD078905
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         RESULT 76
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      FEATURES
  VERSION
KEYWORDS
                                                                      REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       COMMENT
                              SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  d
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ઠે
```

```
Unknow...
Unclassified.
Unclassified.
1 (bases 1 to 20)
Bennett, C.F. and Watt, A.T.
Antisense modulation of tumor necrosis factor receptor 2 expression
Antisense modulation of tumor 55-JUN-2002;
Patent: US 6410324-A 57-55-JUN-2002;
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                PAT 18-DEC-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Unclassified.

1 (bases 1 to 20)
Hermann,B., Koschorz,B. and Kispert,A.
Nucleic acids involved in the responder phenotype and applications thereof Patent: US 6642369-A 29 04-NOV-2003;
PAT 26-JAN-2000
                                                                                                                                                                                                                                                                                                                                                                                                      ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 PAT 25-SEP-2002
                                                                                                                                           1 (bases 1 to 20)
Herrmann, B. and Kispert, A.
NUCLEIC ACIDS INVOLVED IN THE RESPONDER PHENOTYPE AND APPLICATIONS
THEREOF
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Gaps
                                                                                                                                                                                                                                                                                                                                                                                                      Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   .;
0
                                                                                                                                                                                                                                                                                                                                                                                                      ;
                                                                                                                                                                                                                Patent: WO 9925815-A 29 27-MAY-1999;
HERRWANN BERNHARD (DB); MAX PLANCK GESELLSCHAFT (DE)
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                   Length 20;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      linear
                                                                                                                                                                                                                                                                                                                                                                                                        Indels
   linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ..
H
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   DB 1;
                                                                                                                                                                                                                                                                                                                                                                   Score 16.4; DB 1;
Pred. No. 81;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      DNA
     DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               y Match 0.3%; Score 16.4; L
Local Similarity 94.4%; Pred. No. 81;
hes 17; Conservative 0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AR429226 20 bp 1 Sequence 29 from patent US 6642369. AR429226 AR429226.1 GI:40189375
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      20 bp I
Sequence 57 from patent US 6410324.
AR215742
                                                                                                                                                                                                                                                                         1..20
/organism="unidentified"
/mol_type="unassigned DNA"
/db_xref="taxon:32644"
                                                                                                                                                                                                                                                                                                                                                                                                         0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         /organism="unknown"
/mol_type="genomic DNA"
```

Gapa

ö

PAT 27-MAR-2003

셤

```
Human proteins, polynucleotides encoding them and methods of using
                                                    Very low density lipoprotein receptor polymorphisms and uses there
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Li,L., Furtak,K., Perna,A., Patturajan,M., Shimkete,R.A., Guo,X., Casman,S.J., Burgese,C.E., Malyankar,U.M., Tchernev,V.T., Vernet,C.A., Spytek,K.A., Agee,M., Rastelli,L., Shenoy,S.G., Grosse,W.M., Alsobrook,J.P., Lepley,D.M., Gerlach,V., Edinger,S., Macdougall,J.W., Peyman,J.A., Gunther,E., Stone,D.J., Ellerman,K. and Gangolli,E.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         elm N.J., Wahlestedt,C., Liang,Z., s Rensen,A.M., Rum,H. and
Koch,T.
SHORT INTERFERING RNA (siRNA) ANALOGUES
                                                                                       Patent: WO 0166801-A 22 13-SEP-2001;
Complexe Hospitalier de la Sagamie (CA) ; McGILL UNIVERSITY
Location/Qualifiers
   Engert,J., Vohl,M.C., Brewer,C., Morgan,K., Gaudet,D.
Hudbon,T.J.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           0.3%; Score 16.4; DB 1; Length 21; 94.4%; Pred. No. 81; tive 0; Mismatches 1; Indels
                                                                                                                                                                                                                                        0.3%; Score 16.4; DB 1; Length 21; 85.0%; Pred. No. 81; tive 1; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  /organism="synthetic construct"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sequence 16 from Patent WO2004083430.
                                                                                                                                                                                                                                                                                                                                                                                                                                                     DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               synthetic construct
synthetic construct
other sequences; artificial sequences.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     other sequences; artificial sequences.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Patent: WO 0246408-A 153 13-JUN-2002;
Curagen Corporation (US)
                                                                                                                                                                                                                                                                                                                                                                                                                                             21 bp 1
Sequence 153 from Patent W00246408.
AX675429
AX675429.1 GI:29333495
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     /mol_type="unassigned DNA"
/db_xref="taxon:32630"
/note="PCR Primer sequence"
                                                                                                                                                1. .21
/organism="Homo sapiens"
/mol_type="unassigned DNA"
/db_xref="taxon:9606"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Location/Qualifiers
                                                                                                                                                                                                                                                                                                                      3576 TGAACACTCACTTTTTGCAA 3595
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1161 TCCTGAACGTTTTGTTGA 1178
                                                                                                                                                                                                                                                                                                                                                       20 reaacacrcregrerrrecaa 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CQ881300.1 GI:54034352
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           rccreaaggrrrrcrrca 21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  synthetic construct
synthetic construct
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    17; Conservative
                                                                                                                                                                                                                                                                               17; Conservative
                                                                                                                                                                                                                                            Query Match
Best Local Similarity
Matches 17; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Best Local Similarity
Matches 17; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              the same
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      source
                                                                                                                                                    Bource
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ACCESSION
VERSION
                                                                                                                                                                                                                                                                                                                                                                                                                  RESULT 81
AX675429
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     RESULT 82
CQ881300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             VERSION
KEYWORDS
SOURCE
                   AUTHORS
                                                                                         JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AUTHORS
REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             KEYWORDS
                                                                                                                                PEATURES
                                                    TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                         rocus
                                                                                                                                                                                                                                                                                                                                                         셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ઠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         요
                                                                                                                                                                                                                                                                                                                      ઠે
                                                                                                                                                                                                                                                                                                BD091431 20-bp DNA linear PAT 27-AUG-2002 Nucleic acids involved in the responder phenotype and applications thereof.
                                                                                                                                ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 PAT 28-SEP-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Herrmann, B., Koschorz, B. and Kispert, A. Nucleic acids involved in the responder phenotype and applications
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Homo sapiens
Eukaryota, Metazoa, Chordata, Craniata, Vertebrata, Euteleostomi,
Mammalia, Eutheria, Primates, Catarrhini, Hominidae, Homo.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ပ္ပ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   S
S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              98103596.7 PI
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     PF 18-NOV-1998 JP 2000521181
PR 18-NOV-1998 JP 2000521181
PR 18-NOV-1997 EP 97120190.0,02-MAR-1998 EP 98103596.7 PJ
BERNHARD HERRMANN, BIRGIT KOSCHORZ, ANDREAS KISPERT PC
CLUNIS/09,A01K67/027,A61K31/7088,A61K38/45,A61K39/395,A61K48/ 16,
00,A61P15/16,
PC CO7K16/40,CL2N1/15,C12N1/19,C12N1/21,C12N5/10,C12N9/12 PC
PC C12P21/08,C12N115/00,A61K37/52,C12N5/00
CC Description of Artificial Sequence: synthetic no-natural
                                                                                                                                Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ΕŞ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Patent: JP 2001523449-A 20 27-NOV-2001;
MAX PLANCK GESELLSCHAFT ZUR FOERDERUNG DER WISSENSCHAFTEN
S Artificial Sequence
PN JP 200152349-A/20
PD 27-NOV-2001
                                                                                                                                ;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             /organism='Artificial Sequence'
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    0.3%; Score 16.4; DB 1; Length 20;
14.4%; Pred. No. 81;
ve 0; Mismatches 1; Indels
                                                                                           DB 1; Length 20;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 linear
                                                                                                                              1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Location/Qualifiers

    .20
    /organism="synthetic construct"

                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 DNA
                                                                                                                                                                                                                                                                                                                                                                                          JP 2001523449-A/20.
synthetic construct
synthetic construct
other sequences; artificial sequences.
1 (bases 1 to 20)
                                                                                                                            0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         21 bp
Sequence 22 from Patent W00166801.
AX247921
                                                                                     ch 0.3%; Score 16.4; 1 Similarity 94.4%; Pred. No. 81 17; Conservative 0; Mismatche
                   1. .20
/organism="unknown"
/mol_type="genomic DNA"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               /mol_type="genomic DNA"
/db_xref="taxon:32630"
Location/Qualifiers
                                                                                                                                                                    3412 CAGCAAAAGCGGGAGCAG 3429
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                3412 CAGCAAAAGCGGGAGCAG 3429
                                                                                                                                                                                                       cascadadecasease 20
                                                                                                                                                                                                                                                                                                                                                           BD091431
BD091431.1 GI:22637042
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CAGCAAAAGCAGGAGCAG 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AX247921.1 GI:15862544
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ilarity 94.4%;
Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Homo sapiens (human)
                                                                                       Query Match
Best Local Similarity
Matches 17; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           17;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    표보답
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               DEFINITION
                                                                                                                                                                                                                                                                                                                                                     ACCESSION
VERSION
KEYWORDS
SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Bource
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    VERSION
KEYWORDS
SOURCE
ORGANISM
                     Bource
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            RESULT 80
AX247921/c
                                                                                                                                                                                                                                                                                                                  DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      REFERENCE
AUTHORS
TITLE
                                                                                                                                                                                                                                                               RESULT 79
                                                                                                                                                                                                                                                                                 BD091431
LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 JOURNAL
FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 LOCUS
```

ö

Gарв

ò

PAT 11-0CT-2004

gibbs-10-667-022-4.rge

셤

```
Length 21;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Length 16;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                  0.3%; Score 16; DB 1; Length 16; 00.0%; Pred. No. 87;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     linear
Score 16.2; DB 1;
Pred. No. 84;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             DB 1;
87;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    RNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        DNA
                                                                                                                                                                       DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AX215201 17 bp Sequence 643 from Patent W00159103. AX215201. AX215201.1 GI:15525244
 Query Match 0.3%; Score 16.2; E
Best Local Similarity 85.7%; Pred. No. 84;
Matches 18; Conservative 0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                1 Similarity 100.0%; Pred. No. 87; 16; Conservative 0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  16 bp
Sequence 9 from patent US 6759039.
AR561693.1 GI:53974843
                                                                                                                                                                      AR561628 16 bp
Sequence 1 from patent US 6756492.
AR561628
AR561628.1 GI:53974736
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1. .16
/organism="unknown"
/mol_type="genomic DNA"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              0.3%; Score 16;
100.0%; Pred. No.
tive 0; Mismatc
                                                                                                                                                                                                                                                                                                                                                                                                  /mol_type="genomic DNA"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                     1. .16
/organism="unknown"
                                                               2648 AACTGATGCCTTATCTTGACC 2668
                                                                                 21 AACTGATGCCCTATTTTGCCC 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              5025 AAAAAAAAAAAAA 5040
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               5025 AAAAAAAAAAAAA 5040
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1 AAAAAAAAAAAAA 16
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      16 AAAAAAAAAAAAA 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Conservative
                                                                                                                                                                                                                                                                  Unknown.
Unclassified.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Query Match
Best Local Similarity
Matches 16; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                    Query Match
Best Local Similarity
Matches 16; Conserv
                                                                                                                                                                                                                                               Unknown.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Unknown.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Unknown
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           RESULT 86
AR561693/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       DEFINITION
ACCESSION
VERSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      RESULT 87
AX215201/c
LOCUS
                                                                                                                                                                                                                                                                                                                                                                            source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ACCESSION
VERSION
KEYWORDS
                                                                                                                                                                                                    ACCESSION
VERSION
KEYWORDS
                                                                                                                                                                                      DEFINITION
                                                                                                                                                                                                                                                                  ORGANISM
                                                                                                                                                                                                                                                                                                                            TITLE
JOURNAL
FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             REFERENCE
AUTHORS
                                                                                                                                          RESULT 85
AR561628
LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          JOURNAL
                                                                                                                                                                                                                                                                                                            AUTHORS
                                                                                                                                                                                                                                                                                                 REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TITLE
                                                                                                                                                                                                                                                      SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ठे
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             셤
                                                                                            g
                                                                    ਨੇ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          PAT 08-JAN-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Busslinger, M., Mikkola, I. and Heavey, B.
Pax-5-deficient pro-b-cells, methods of producing them and the use
of such cells in human therapy
Patent: WO 03095634-A 26 20-NOV-2003;
BOEHRINGER INGELHEIM INTERNATIONAL GMBH; CD Patents (DE)
                                                                                                                                                                          ö
                                                                                                                                                                                                                                                                                                                 PAT 06-JAN-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                     Busslinger,M., Mikkola,I. and Heavey,B.
Pax-5-deficient pro-B cells, methods of producing them and the use of such cells in human therapy
Patent: EP 1361268-A 26 12-NOV-2003;
Boehringer Ingelheim International GmbH (DE)
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         /organism="synthetic construct"
/mol type="unassigned DNN"
/db_xref="taxon:32630"
/noTe="Description of Artificial Sequence: PCR Primer"

    1. .21
    /organism="synthetic construct"
    /mol_type="unassigned DNA"
    /db_xref="taxon:32630"
    /noTe="Description of Artificial Sequence: PCR Primer"

                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Gaps
                                                                                                                                                                            Gaps
                                                                                                                                                                            ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Length 21;
                                                                                                                                         0.3%; Score 16.2; DB 1; Length 21;
15.7%; Pred. No. 84;
ve 0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                  linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          DB 1;
                                                                   /organism="synthetic construct"
/mol type="unassigned RNA"
/mol type="unassigned RNA"
/noFe="siRNA targeting SARS"
       Patent: WO 2004083430-A 16 30-SEP-2004;
Santaris Pharma A/S (DK)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             DNA
                                                                                                                                                                                                                                                                                                                  DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   other sequences; artificial sequences.
                                                                                                                                                                                                                                                                                                                                                                                             synthetic construct
synthetic construct
other sequences, artificial sequences.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        0.3%; Score 16.2; D
85.7%; Pred. No. 84;
ative 0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      21 bp L Sequence 26 from Patent WO03095634. AX951931
                                                                                                                                                                                                                                                                                                                               Sequence 26 from Patent EP1361268.
                                                                                                                                                                                                                                                                                                                  21 bp
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Location/Qualifiers
                                                                                                                                                                                                         3855 TIGIGITGIGATAIGCAICA 3875
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     2648 AACTGATGCCTTATCTTGACC 2668
                                         Location/Qualifiers
                                                                                                                                                                                                                            21 AACTGATGCCCTATTTTGCCC 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AX951931.1 GI:40782314
                                                                                                                                                                                                                                                                                                                                                             AX937073.1 GI:40713260
                                                                                                                                                            ilarity 85.7%;
Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        synthetic construct
synthetic construct
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Query Match
Best Local Similarity 85.7'
Matches 18; Conservative
                                                                                                                                              Query Match
Best Local Similarity
Matches 18; Conserv
                                                                                                                                                                                                                                                                                                                  AX937073
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             LOCUS
DEFINITION
ACCESSION
VERSION
KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 source
                                                                                                                                                                                                                                                                                                 AX937073/c
LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ORGANISM
                                                                                                                                                                                                                                                                                                                               DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                             ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AX951931/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     REFERENCE
AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                          REFERENCE
AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 JOURNAL
            JOURNAL
                                                                                                                                                                                                                                                                                                                                                  ACCESSION
                                                                                                                                                                                                                                                                                                                                                                 VERSION
KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     JOURNAL
                                                                                                                                                                                                                                                                                       RESULT 83
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                FEATURES
                                       FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TITLE
                                                                                                                                                                                                                                                                                                                                                                                                 SOURCE
```

ď

```
ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        PAT 07-SEP-2001
;
                                                                                                                                                                         PAT 08-OCT-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         PAT 08-OCT-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Unclassified.

1 (bases 1 to 16)

1 sang, W.-G., Zheng, T. and Huang, C.J.

Culturing pancreatic stem cells having a specified, intermediate stage of development

Patent: US 6759039-A 9 06-JUL-2004;
  Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Gaps
                                                                                                                                                                                                                                                                                                                                   1 (bases 1 to 16)
Beier,M. and Honeisel,J.
Nucleoside derivatives with photo-unstable protective groups
Patent: US 6756492-A 1 29-UN-2004;
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ;
    .
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ;
0
```

```
PAT 08-AUG-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         PAT 17-DEC-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1 (bases 1 to. 20)
Abe, S. and Sato, Y.
Solid phases for target nucleic acid detection, process for production thereof, and method of target nucleic acid detection Patent: US 6225056-A 10 11-MAY-2001;
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Gape
                                                                                                                                                                                                                       Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Gapa
apoptosis and/or viral resistance phenomena and their use as medicines
                                                                                                                                                                                                                      ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ö
                                                                                                                                                                                                                                                                                                                                                                          linear
                                                                                                                                                                                      Length 17;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     0.3%; Score 16; DB 1; Length 20;
100.0%; Pred. No. 87;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Query Match 0.3%; Score 16; DB 1; Length 21; Best Local Similarity 100.0%; Pred. No. 87; Matches 16; Conservative 0; Mismatches 0; Indels
                                                                                                                                                                                                                      0; Indela
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           linear
                                            Molecular Engines Laboratories (FR)
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1 (bases 1 to 21)
Schwarz,M.A., Zhang,P. and Gebb,S.A.
Methods of facilitating vascular growth
Patent: US 6306612-A 6 23-OCT-2001;
                                                                                                                                                                                  Score 16; DB 1;
Pred. No. 87;
                                                                                                                                                                                                                                                                                                                                                                            DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           DNA
                                                                                                                                                                                           100.0%; Pred. No.

    .17
    /organism="Homo sapiens"
    /mol_type="unassigned DNA"
    /db_xref="taxon:9606"

                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Best Local Similarity 100.0%; Pred. No. 87;
Matches 16; Conservative 0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   /organism="unknown"
/mol_type="unassigned DNA"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  /mol_type="unassigned DNA"
                                                                                                                                                                                                                                                                                                                                                                   Sequence 1 from patent US 6225056. ARI48114.1 GI:15112204
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Sequence 6 from patent US 6306612. AR173949

    .20
    /organism="unknown"

                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    2988 GAGCCATCTTCATGAT 3003
                                                                                                                                                                                                                                                       4929 TIGIATIGAAAAAGAT 4944
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AR173949.1 GI:17914269
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1 GGATCCCCCGGGCTGC 16
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          GGATCCCCCGGGCTGC 20
                                                                                                                                                                                                                                                                                     17 rrgrarrgaaagar 2
                                                                                                                                                                                                                      16; Conservative
                                                                                                                                                                                  Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Unclassified.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Unclassified.
                                                                                                                                                                                                                                                                                                                                                                                                                                                             Unknown.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Unknown
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Unknown
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Unknown
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Query Match
                                                                                                      source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Bource
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   source
                                                                                                                                                                                                                                                                                                                                                                        LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                            KEYWORDS
SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         DEFINITION
ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                          ACCESSION
VERSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TITLE
JOURNAL
                                                                                                                                                                                                                                                                                                                                        RESULT 90
AR148114
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        RESULT 91
AR173949
LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            REFERENCE
AUTHORS
                                                                                                                                                                                                                      Matches
                                                   JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AUTHORS
                                                                                    FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           VERSION
                                                                                                                                                                                                                                                       ð
                                                                                                                                                                                                                                                                                   셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        δ
                                                                                                                                                                                                                                                                                                                                          ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 PAT 25-JUN-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 PAT 25-JUN-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Eukaryota, Metazoa, Chordata, Craniata, Vertebrata, Euteleostomi,
Mammalia, Eutheria, Primates, Catarrhini, Hominidae, Homo.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Eukaryota, Metazoa, Chordata, Craniata, Vertebrata, Euteleostomi,
Mammalia, Eutheria, Primates, Catarrhini, Hominidae, Homo.
                                                                               Blatt, L., Mcswiggen, J. and Chowrira, B.M.
Method and reagent for the modulation and diagnosis of cd20 and
nogo gene expression
Patent: WO 0159103-A 643 16-AUG-2001;
RIBOZYME PHARMACEUTICALE, INC. (US); Blatt, Lawrence (US);
McSwiggen, James (US); Chowrira, Bharat M. (US)
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                          Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Telerman, A., Amson, R. and Tuijnder, M.
Sequences involved in tumoral suppression, tumoral reversion, apoptosis and/or viral resistance phenomena and their use as medicines
Patent: WO 03040369-A 668 15-MAY-2003;
Molecular Engines Laboratories (FR)
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Telerman, A., Amson, R. and Tuijnder, M.
Sequences involved in tumoral suppression, tumoral reversion.
                                                                                                                                                                                                                                                                                                                                          ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         0.3%; Score 16; DB 1; Length 17;
100.0%; Pred. No. 87;
ative 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                         Length 17;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               linear
                                                                                                                                                                                                                                                                                                                                          0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 linear
                                                                                                                                                                                                                  /organism="synthetic construct"
/mol type="unassigned RNA"
/db_xref="taxon:32630"
/noce="Nucleic Acid"
                                                                                                                                                                                                                                                                                                     Query Match 0.3%; Score 16; DB 1; Best Local Similarity 100.0%; Pred. No. 87; Matches 16; Conservative 0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AX762159 17 bp DNA
Sequence 5480 from Patent WO03040369.
AX762159 GI:32256775
                                                 other sequences; artificial sequences,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        17 bp DN Sequence 668 from Patent W003040369. AX757347
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    /organism="Homo sapiens"
/mol_type="unassigned DNA"
/db_xref="taxon:9606"
                                                                                                                                                                                                                                                                                                                                                                          3735 TTTAGCCATAGCATCT 3750
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AX757347.1 GI:32251963
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             2857 GATCCTGCCATAGCAC 2872
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    GATCCTGCCATAGCAC 16
                                                                                                                                                                                                                                                                                                                                                                                              TTTAGCCATAGCATCT 2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Homo sapiens (human)
Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Homo sapiens (human)
                 synthetic construct
                                   synthetic construct
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Query Match 0.3
Best Local Similarity 100.
Matches 16; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                          RESULT 88
AX757347
LOCUS
DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ACCESSION
VERSION
KEYWORDS
SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AX762159/c
LOCUS
DEFINITION
ACCESSION
                               ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                REFERENCE
AUTHORS
TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  REFERENCE
AUTHORS
TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               VERSION
KEYWORDS
SOURCE
                                                                 REFERENCE
                                                                                   AUTHORS
                                                                                                                                 JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                RESULT 89
                                                                                                                                                                                    FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      FEATURES
                                                                                                 TITLE
```

ઠ 셤

δ 셤 ö

```
usm syntuactic construct

the sequences artificial sequences.

the sequences artificial sequences.

S Schwarz,M., Zhang,F. and Gebb,S.A.

Methods of facilitating vascular growth

AL Decellitating vascular growth

AL DEC-2002;

CHILDREN'S HOSPITAL OF LOS ANGELES

OS Artificial Sequence

N JP 2002542145-A/12

PD 10-DEC-2002

PP 12-NOV-1999 UP 2000582601

PR 13-NOV-1999 US 60/108435

PI MARGARET SCHWARZ,FANGRONG ZHANG,SARAH A GEBB

PC AGIK45/00,AGIK9/08,AGIK39/395,AGIK45/06,AGIK47/02,AGIP9/00, PC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           PAT 22-JUN-2001
                                                                                                                                                                                 PAT 17-JUL-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               S
S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          A61P43/00, C07K2/00, C07K16/18, C12N15/09, C12Q1/02, C12Q1/68,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           pc A61943/00,C07K2/00,C07K16/18,C12N15/09,C12Q1/02,C12Q1/09,Q01N13/15,G01N3/53,G01N33/53,G01N33/56,C12N15/00 CC Description of Artificial Sequence: primer Location/Qualifiers FR Key 1.21 source 1.21 /organism='Artificial Sequence'.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      .
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              /organism='Artificial Sequence'
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Query Match

0.3%; Score 16; DB 1; Length 21;
Best Local Similarity 88.9%; Pred. No. 87;
Matches 16; Conservative 1; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Query Match 0.3%; Score 16; DB 1; Length 21; Best Local Similarity 100.0%; Pred. No. 87; Matches 16; Conservative 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    linear
                                                                                                                                                                                         linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Cargill, M., Ireland, J.S. and Lander, E.S.
Human single nucleotide polymorphisms
Patent: WO 0138776-A 341 31-MAY-2001;
WHITEHEAD INSTITUTE FOR BIOMEDICAL RESEARCH (US)
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1. .21
/organism="synthetic construct"
/mol_type="genomic DNA"
/db_xref="taxon:32630"
                                                                                                                                                                                     BD271303 21 bp DNA Methods of facilitating vascular growth.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    21 bp I
Sequence 341 from Patent WO0138576.
AX154243
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1. .21
/organism="Homo sapiens"
/mol_type="unassigned DNA"
/db_xref="taxon:9606"
                                                                                                                                                                                                                                                                        BD271303
BD271303.1 GI:33081071
JP 2002542145-A/12.
synthetic construct
synthetic construct
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AX154243.1 GI:14535857
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    2988 GAGCCATCTTCATGAT 3003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             s GAGCCATCTTCATGAT 20
GAGCCATCTTCATGAT 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Homo sapiens (human)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  A61P11/00
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 DEFINITION
ACCESSION
VERSION
KEYWORDS
SOURCE
ORGANISM
                                                                                                                                                                                                                                   DEFINITION
ACCESSION
VERSION
KEYWORDS
SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       REFERENCE
AUTHORS
TITLE
JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      RESULT 95
AX154243
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   REFERENCE
AUTHORS
TITLE
JOURNAL
                                                                                                                       RESULT 94
BD271303
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      COMMENT
                                                                                                                                                                                                          LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            cyncurcan conservation sequences.

cyncurcan conservation of the c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        PAT 17-JUL-2003
                                                                                                                                                                                                              PAT 17-DEC-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 A61P43/00, C07K2/00, C07K16/18, C12N15/09, C12Q1/02, C12Q1/68, PC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                A61P1/00,
PC A61P43/00, CO7K2/00, CO7K16/18, C12N15/09, C12Q1/02, C12Q1/06, C07K2/00, C07K16/18, C12N15/09, C12Q1/02, C12Q1/02, C12Q1/03/15, PC A61P43/53, G01N33/59, G01N33/50, G01N33/50,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ô
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                /organism='Artificial Sequence' Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Query Match 0.3%; Score 16; DB 1; Length 21; Best Local Similarity 100.0%; Pred. No. 87; Matches 16; Conservative 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Query Match

0.3%; Score 16; DB 1; Length 21;
Best Local Similarity 100.0%; Pred. No. 87;
Matches 16; Conservative 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        /organism="synthetic construct"
/mol type="genomic DNA"
/db_xref="taxon:32630"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            21 bp DNA Methods of facilitating vascular growth. BD271297
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1 (bases 1 to 21)
Schwarz,M.A., Zhang,F. and Gebb,S.A.
Methods of facilitating vascular growth
Patent: US 3306612-A 12 23-OCT-2001;
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       /organism="unknown"
/mol_type="unassigned DNA"
                                                                                                                                                                                                                      AR173955 21 bp 8817395612.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              2988 GAGCCATCTTCATGAT 3003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            BD271297.1 GI:33081065
JP 2002542145-A/6.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        2988 GAGCCATCTTCATGAT 3003
                                                                                                                                                                                                                                                                                                             AR173955
AR173955.1 GI:17914275
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 S GAGCCATCTTCATGAT 20
                        GAGCCATCTTCATGAT 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              synthetic construct
synthetic construct
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Unclassified.
                                                                                                                                                                                                                                                                                                                                                                                                                             Unknown.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Unknown
```

DEFINITION ACCESSION VERSION KEYWORDS SOURCE ORGANISM

RESULT 93 BD271297 LOCUS

8

REFERENCE AUTHORS TITLE JOURNAL

source

DEFINITION

RESULT 92 AR173955 LOCUS

용

ORGANISM

VERSION KEYWORDS SOURCE

REFERENCE AUTHORS TITLE JOURNAL ö

ö

source

8

FEATURES

LOCUS

RESULT 96 195654/c

ò

TITLE JOURNAL FEATURES

REFERENCE AUTHORS

```
Kamb, A. Probes for MTS1 gene and polynucleotides encoding mutant MTS1 genes Patent: US 5801236-A 8 01-SEP-1998;
                                                                                                                                                                                                                                                                                                    PAT 29-SEP-1999
                                                                                                                                                                       ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ô
                                                                                                                                                                        Gapa
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Gapa
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Gape
                                                                                                                                                                        ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ..
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ö
                                                                                                                                            Length 20;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Length 20;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Length 20,
                                                                                                                                                                                                                                                                                                     linear
                                                                                                                                                                       Indele
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Indels
                                                                                                                                                                     5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                5,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         7
                                                                                                                                          DB 1,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     DB 1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              DB 1;
                                                                                                                                                                                                                                                                                                     DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                DNA
                                                                                                                                         Query Match 0.3%; Score 15.8; E
Best Local Similarity 89.5%; Pred. No. 91;
Matches 17; Conservative 0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ch 0.3%; Score 15.8; D. Similarity 89.5%; Pred. No. 91; 17; Conservative 0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Unknown.
Unclassified.
1 (bases 1 to 20)
Stone, S., Jiang, P. and Kamb, A.
Mouse MTSI gene
Patent: US 5843756-A 8 01-DEC-1998;
                  L .~~.
Kamb,A.
MTSLE1.beta. gene
Patent: US 5739027-A 8 14-APR-1998;
Location/Qualifiers
                                                                                  1. .20
/organism="unknown"
/mol_type="unassigned DNA"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1. .20
/organism="unknown"
/mol_type="unassigned DNA"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Query Match 0.3%; Score 15.8; I
Best Local Similarity 89.5%; Pred. No. 91;
Matches 17; Conservative 0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1. .20
/organism="unknown"
/mol_type="unassigned DNA"
                                                                                                                                                                                                                                                                                                  AR037500 20 bp
Sequence 8 from patent US 5801236.
AR037500
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AR062780 20 bp
Sequence 8 from patent US 5843756.
AR062780
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Location/Qualifiers
                                                                                                                                                                                                  4079 GGTTCCAGTTGCCAATTTC 4097
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             4079 GGTTCCAGTTGCCAATTTC 4097
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      4079 GGTTCCAGTTGCCAATTTC 4097
                                                                                                                                                                                                                             20 GCTTCCAGTTTCCAATTTC 2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        20 ścrrccagrrrccarrrc 2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   20 gcrrccagrrccaarrrc 2
                                                                                                                                                                                                                                                                                                                                             AR037500.1 GI:5955356
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AR062780.1 GI:5990471
            (bases 1 to 20)
                                                                                                                                                                                                                                                                                                                                                                                                                   (bases 1 to 20)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Query Match
Best Local Similarity
Matches 17; Conservat
Unclassified
                                                                                                                                                                                                                                                                                                                                                                                                      Unclassified
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Unknown.
                                                                                                                                                                                                                                                                                                                                                                           Unknown.
                                                                                                                                                                                                                                                                                                                                                                                          Unknown
                                                                                  Bource
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Bource
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           DEFINITION
ACCESSION
VERSION
KEYWORDS
                                                                                                                                                                                                                                                                      RESULT 99
AR037500/c
LOCUS
                                                                                                                                                                                                                                                                                                                                                                         SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AR062780/c
LOCUS
                                                      JOURNAL
FEATURES
                                                                                                                                                                                                                                                                                                                DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                  REFERENCE
AUTHORS
TITLE
JOURNAL
FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TITLE
JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     RESULT 100
            REFERENCE
AUTHORS
                                                                                                                                                                                                                                                                                                                               ACCESSION
VERSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                REFERENCE
                                                                                                                                                                                                                                                                                                                                                            KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         FEATURES
                                        TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     SOURCE
                                                                                                                                                                                                                          a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             a
                                                                                                             PAT 01-DEC-1998
                                                                                                                                                                                                                                                                                                                                                                                                       ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      PAT 12-JUN-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                PAT 04-DEC-1998
                                                                                                                                                                                                      Unclassified.

1 (bases 1 to 19)
Campbell.K.P., Roberds, S.L., Sunada, Y., Piccolo, F., Jeanpierre, M. and Kaplan, J.-C.
Methods for detecting primary adhalinopathy
Patent: US 5733732-A 21 31-MAR-1998;
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                       Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                JM Unknown.

Which was a series of the series of $537751-A 4157 25-WAR-2003;

Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                       ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ..
                                                                                                                                                                                                                                                                                                                                                                         DB 1; Length 19;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   DB 1; Length 19;
                                                                                                               linear
                                                                                                                                                                                                                                                                                                                                                                                                      2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              linear
                                                                                                                                                                                                                                                                                                                                                                      Score 15.8; DB; Pred. No. 91; 0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    19 bp Di
Sequence 4157 from patent US 6537751
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Query Match 0.3%; Score 15.8; DE Best Local Similarity 89.5%; Pred. No. 91; Matches 17; Conservative 0; Mismatches
                                                                                                            195654
Sequence 21 from patent US 5733732.
                                                                                                                                                                                                                                                                                                                   1. .19
/organism="unknown"
/mol_type="unassigned DNA"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AR001320 20 bp
Sequence 8 from patent US 5739027.
                                                                                                                                                                                                                                                                                                                                                                                                                                  4171 GCAGCTGTTCAGGGCAACA 4189
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           3884 CTGGAGCACAGTCTGTTCT 3902
            4030 TGGCTCTGCATTGGTACA 4047
                            TGGCTCTGAAYTGGTACA 18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      19 cricadercadrerer 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                              19 scassrstrcasssca 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AR292422.1 GI:31679706
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AR001320
AR001320.1 GI:3963387
                                                                                                                                                                                                                                                                                                                                                                        Query Match
Best Local Similarity 89.5%;
Matches 17; Conservative
                                                                                                                                                      195654.1 GI:3940124
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AR292422
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Unknown.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Unknown.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Unknown.
                                                                                                                                                                                   Unknown
                                                                                                                                                                                                  Unknown
                                                                                                                                      ACCESSION
VERSION
KEYWORDS
SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      DEFINITION
ACCESSION
VERSION
KEYWORDS
SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               DEFINITION
ACCESSION
VERSION
KEYWORDS
                                                                                                                                                                                                                                                                                                                   source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AR292422/c
LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                RESULT 98
AR001320/c
LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Bource
```

REFERENCE AUTHORS TITLE

RESULT 97

ð 셤 JOURNAL

ઠે

```
PAT 08-AUG-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           PAT 08-AUG-2001
                                                                                                                                                                                                PAT 16-MAY-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Gaps
                                                                          Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ö
                                                                         ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Query Match 0.3%; Score 15.8; DB 1; Length 20; Best Local Similarity 89.5%; Pred. No. 91; Matches 17; Conservative 0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                      Query Match 0.1%; Score 15.8; DB 1; Length 20; Best Local Similarity 89.5%; Pred. No. 91; Matches 17; Conservative 0; Mismatches 2; Indels
                                              Length 20;
                                                                                                                                                                                                   linear
                                             Query Match 0.3%; Score 15.8; DB 1;
Best Local Similarity 89.5%; Pred. No. 91;
Matches 17; Conservative 0; Mismatches 2;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        M Unknown.
Unclassified.
Unclassified.
E (base 1 to 20)
Stone,S., Jiang,P. and Kamb,A.
Mouse MTS2 gene
Ant. Patent: US 6210949-A 8 03-APR-2001;
Location/Qualifiers
....known.
                                                                                                                                                                                                   DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1. .20
/organism="unknown"
/wol_type="unassigned DNA"
                                                                                                                                                                                                                                                                                                                                                                                                             /mol_type="unassigned DNA"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               RESULT 106
AR145921/C
LOUIS
AR145921
DEFINITION Sequence 8 from patent US 6218146.
                                                                                                                                                                                                                                                                                                                                                        Patent: US 6180776-A 8 30-JAN-2001;
Location/Qualifiers
    /organism="unknown"
/wol_type="unassigned DNA"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AR144920 20 bp
Sequence 8 from patent US 6210949.
AR144920. GI:15106787
                                                                                                                                                                                               20 bp
Sequence 8 from patent US 6180776.
AR127753
                                                                                                                                                                                                                                                                                                                                                                                1. .20 /organism="unknown"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           4079 GGTTCCAGTTGCCAATTTC 4097
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                4079 GGTTCCAGTTGCCAATTTC 4097
                                                                                                      4079 GGTTCCAGTTGCCAATTTC 4097
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                20 GCTTCCAGTTTCCAATTTC 2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     20 GCTTCCAGTTTCCAATTTC 2
                                                                                                                       20 GCTTCCAGTTTCCAATTTC 2
                                                                                                                                                                                                                                              AR127753.1 GI:14114348
                                                                                                                                                                                                                                                                                                                 (bases 1 to 20)
                                                                                                                                                                                                                                                                                                    Unclassified.
                                                                                                                                                                                                                                                                                                                               Kamb,A.
MTS2 gene
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Unknown.
                                                                                                                                                                                                                                                                      Unknown.
                                                                                                                                                                                                                                                                                         Unknown
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   source
                                                                                                                                                                         RESULT 104
AR127753/C
LOCUS
DEFINITION
ACCESSION
VERSION
                                                                                                                                                                                                                                                           KEYWORDS
SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            DEFINITION
ACCESSION
VERSION
KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                          source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      RESULT 105
AR144920/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TITLE
JOURNAL
FEATURES
source
                                                                                                                                                                                                                                                                                                                                              TITLE
JOURNAL
FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             REFERENCE
AUTHORS
                                                                                                                                                                                                                                                                                                                    REFERENCE
                                                                                                                                                                                                                                                                                                                                 AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          PAT 16-MAY-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                PAT 07-SEP-2000
                                                                                                                                                                                                                                                                                                                     ö
                                                      PAT 07-SEP-2000
                                                                                                                                                                  1. (bases 1 to 20)
Skolnick,M.H., Cannon-Albright,L.A. and Kamb,A.
Methods for detecting predisposition to cancer at the MTS gene
Patent: US 5989815-A 8 23-NOV-1999;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Gaps
                                                                                                                                                                                                                                                                                                                       Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ;
0
                                                                                                                                                                                                                                                                                                                       ..
0
                                                                                                                                                                                                                                                                                         Query Match 0.3%; Score 15.8; DB 1; Length 20; Best Local Similarity 89.5%; Pred. No. 91; Matches 17; Conservative 0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Query Match
0.3%; Score 15.8; DB 1; Length 20;
Best Local Similarity 89.5%; Pred. No. 91;
Matches 17; Conservative 0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          linear
                                                       linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                 linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Kamb, A.
Antibodies specific for MTS2 Polypeptide
Patent: US 6140473-A 8 31-OCT-2000;
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             DNA
                                                       DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1. .20
/organism="unknown"
/mol_type="unassigned DNA"
                                                                                                                                                                                                                                        1. .20
/organism="unknown"
/mol_type="unassigned DNA"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Patent: US 5994095-A 8 30-NOV-1999;
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                             20 bp
Sequence 8 from patent US 5994095.
AR091328
AR091328.1 GI:10018083
                                                 20 bp
Sequence 8 from patent US 5989815.
AR087858
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AR118034 20 bp
Sequence 8 from patent US 6140473.
AR118034.1 GI:14098940
                                                                                                                                                                                                                        Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              4079 GGTTCCAGTTGCCAATTTC 4097
                                                                                                                                                                                                                                                                                                                                                    4079 GGTTCCAGTTGCCAATTTC 4097
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             20 GCTTCCAGTTTCCAATTTC 2
                                                                                                                                                                                                                                                                                                                                                                    20 GCTTCCAGTTTCCAATTTC 2
                                                                                             AR087858.1 GI:10014621
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Unclassified.
1 (bases 1 to 20)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               (bases 1 to 20)
                                                                                                                                                      Unclassified.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Unclassified.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Kamb, A.
MTS2 gene
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Unknown.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Unknown.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Unknown.
                                                                                                                            Unknown.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Unknown
                                                                                                                                            Unknown
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                RESULT 103
AR118034/c
LOCUS
DEFINITION
ACCESSION
VERSION
KEYWORDS
SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       source
                              RESULT 101
AR087858/c
LOCUS
DEFINITION
                                                                                                                                                                                                                                            source
                                                                                                                                                                                                                                                                                                                                                                                                                                       AR091328/c
LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        REFERENCE
AUTHORS
TITLE
JOURNAL
FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TITLE
JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ACCESSION
VERSION
                                                                                                                                          ORGANISM
                                                                                                                                                                     REFERENCE
AUTHORS
TITLE
JOURNAL
FEATURES
                                                                                   ACCESSION
VERSION
KEYWORDS
SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                          RESULT 102
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         셤
                                                                                                                                                                                                                                                                                                                                                                           qq
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ò
```

ö

gibbs-10-667-022-4.rge

```
PAT 03-MAR-2004
                                PAT 03-MAR-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           PAT 13-MAY-1997
                                                                                                                                                                                                                                                                                                                                                                                              Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Gaps
                                                                                                                                                                                                                                                                                                                                                                                                ö
                                                                                                                                                                                                                                                                                                                                                                DB 1; Length 20;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Query Match 0.3%; Score 15.8; DB 1; Length 20; Best Local Similarity 89.5%; Pred. No. 91; Matches 17; Conservative 0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               linear
                                  linear
                                                                                                                                                                                                                                                                                                                                                                                              2; Indels
                                                                                                                                                                                           Antisense modulation of 1rh1 expression
Patent: WO 2004003201-A 692 08-JAN-2004;
Pharmacia Corporation (US)
Location/Qualifiers
1. .20
/organism="synthetic construct"
/mol_type="unassigned DNA"
/db_xref="taxon:32630"
/note="Human LRH1 antisense"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Antisense modulation of 1rh1 expression
Patent: WO 2004003201-A 1640 08-JAN-2004;
Pharmacia Corporation (US)
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1. .20
/organism="synthetic construct"
/wol_type="unassigned DNA"
/db_xref="teaxon:32630"
/noTe="Human LRH1 antisense"
                                CQ762074 20 bp DNA Sequence 692 from Patent WO2004003201. CQ762074
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CQ763022 20 bp DNA Sequence 1640 from Patent WO2004003201.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            DNA
                                                                                                            synthetic construct
synthetic construct
other sequences, artificial sequences.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              other sequences; artificial sequences.
                                                                                                                                                                                                                                                                                                                                                              0.3%; Score 15.8; I
89.5%; Pred. No. 91;
tive 0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      20 bp
Sequence 8 from patent US 5624819.
141154
                                                                                                                                                                                                                                                                                                                                                                                                                               3303 AACTGTCCAAAATAAAAA 3321
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            3303 AACTGTCCAAAATAAAAA 3321
                                                                                                                                                                                                                                                                                                                                                                                                                                                             19 AACAGICCAAAAIAATAAA 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CQ763022
CQ763022.1 GI:44906258
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               20 AACAGTCCAAAATAAAA 2
                                                                               CQ762074.1 GI:44905310
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            GI:2081744
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             synthetic construct
synthetic construct
                                                                                                                                                                                                                                                                                                                                                       Query Match
Best Local Similarity 89.5
Matches 17; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Unknown.
Unclassified.
1 (bases 1 to 20)
                                                                                                                                                                               Kane, C.D.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Kane, C.D.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          141154.1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Unknown.
                                             DEFINITION
ACCESSION
VERSION
KEYWORDS
                                                                                                                                                                                                                                                                  source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             RESULT 109
CQ763022/c
LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            RESULT 110
I41154/c
                 CQ762074/c
                                                                                                                               ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ACCESSION
VERSION
KEYWORDS
SOURCE
                                                                                                                                                                                              TITLE
JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           REFERENCE
AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ACCESSION
VERSION
                                                                                                                                                                                  AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            REFERENCE
                                                                                                                                                               REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           KEYWORDS
SOURCE
                                                                                                                                                                                                                                               FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             FEATURES
                                                                                                                SOURCE
                                  LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                             8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       synthetic construct
other sequences; artificial sequences.
Sim,G., Yang,S., Dreitz,M.J. and Wonderling,R.S.
Canine and felline immunoregulatory proteins, nucleic acid molecules and method of using the same method of using the same method of using the same parent: JP 2002516104-A 115 04-JUN-2002;
RESKA CORP
OS Artificial Sequence
PN JP 2002516104-A/115
PP 28-MAY-1999 JP 2000551002
PP 28-MAY-1999 US 60/087306
PI GERKER SIM,SHUMIN YANG,MATTHEW J DREITZ,RAMANI S WONDERLING PC CL2N15/09,A61K31/7088,A61K38/21,A61K38/21,A61K38/39,395,
                                                                                                                                                                                                                                                                                                                                                                                                            20 bp DNA linear PAT 17-JUL-2003 Canine and feline immunoregulatory proteins, nucleic acid molecules and method of using the same.
                                                                                                                                                                                                                                                                                ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           C07K14/56, C07K14/705, C07K16/24, C07K16/28, C12N1/21, C12N5/10, PC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          A61K45/00,A61K48/00,A61P37/02,A61P37/04,C07K14/475,C07K14/535,
C07K14/54,
                                                                                                                                                                                                                                                                                Gарв
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          PC G01N33/50,C12N15/00,A61K37/02,A61K37/66,C12N5/00 CC Description of Artificial Sequence: Synthetic Primer FH Location/Qualifiers
                                                                                                                                                                                                                                                                                ;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           0.3%; Score 15.8; DB 1; Length 20; 89.5%; Pred. No. 91; ative 0; Mismatches 2; Indels
                                                                                                                                                                                                                                               DB 1; Length 20;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       /organism='Artificial Sequence' Location/Qualifiers
                                                                                                                                                                                                                                                                                Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1. 20
/organism="synthetic construct"
/mol_type="genomic DNA"
/db_xref="taxon:32630"
                                                                                                                                                                                                                                              0.3%; Score 15.8; D
89.5%; Pred. No. 91;
cive 0; Mismatches
                                                                                                                            MTS2 gene
Patent: US 6218146-A 8 17-APR-2001;
                                                                                                                                                         Location/Qualifiers
1. .20
/organism="unknown"
/mol_type="unassigned DNA"
                                                                                                                                                                                                                                                                                                              4079 GGTTCCAGTTGCCAATTTC 4097
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           3920 ATGGCTCTCTGGTTGGCTG 3938
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1 ATGGCGCTCTGGTTGACTG 19
                                                                                                                                                                                                                                                                                                                                           20 GCTTCCAGTTTCC 2
                 GI:15109110
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            BD211609.1 GI:33021379 JP 2002516104-A/115.
                                                                            Unclassified.
1 (bases 1 to 20)
                                                                                                                                                                                                                                              Query Match
Best Local Similarity 89.5
Matches 17; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Best Local Similarity 89.5
Matches 17, Conservative
 AR145921
AR145921.1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            G01N33/15
                                               Unknown
                                                                Unknown
                                                                                                              Kamb, A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           2222
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Query Match
                                                                                                                                                                                  Bource
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ACCESSION
VERSION
KEYWORDS
SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              source
                                                                                                                                                                                                                                                                                                                                                                                                                             LOCUS
DEFINITION
                                                              ORGANISM
                                                                                                            AUTHORS
TITLE
JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                             RESULT 107
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            REFERENCE
AUTHORS
ACCESSION
               VERSION
KEYWORDS
                                                                                               REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                              BD211609
                                                                                                                                                               FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             COMMENT
                                               SOURCE
                                                                                                                                                                                                                                                                                                                                      g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ઠ
                                                                                                                                                                                                                                                                                                                ઠ
```

ö

```
PAT 20-DEC-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          PAT 17-AUG-2003
                      PAT 20-DEC-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1 (bases 1 to 20)
Butler,J.H. and Brennan,T.M.
Method and apparatus for in situ synthesis on a solid support
Patent: US 6589726-A 5 08-JUL-2003;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Gaps
                                                                                                                                                                                                                                                                                                               Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Unknown.
Unclassified.
Unclassified.
1 (bases 1 to 20)
Sim,G.-K., Yang,S., Dreitz,M.J. and Wonderling,R.S.
Sim,G.-K., Yang,S., Dreitz,M.J. and Wonderling,R.S.
Caniney IL-13 immunoregulatory proteins and uses thereof
Patent: US 6482403-A 143 19-NOV-2002;
Patent: Location/Qualifiers
                                                                                                                                                                                                                                                                                                               ;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ö
                                                                                                                                      1 (bases I to 20)
Sim,G.-K., Yang,S., Dreitz,M.J. and Wonderling,R.S.
Canine IL-4 immunoregulatory proteins and uses thereof
Patent: US 6471957-A 143 29-OCT-2002;
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    tch 0.3%; Score 15.8; DB 1; Length 20; al Similarity 89.5%; Pred. No. 91; 17; Conservative 0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                   DB 1; Length 20
                                                                                                                                                                                                                                                                                                             2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                 linear
                         linear
                    20 bp DI Sequence 143 from patent US 6471957. AR241587
                                                                                                                                                                                                                                                                                                                                                                                                                                                 AR254543 20 bp D1
Sequence 143 from patent US 6482403.
AR254543
                                                                                                                                                                                                                                                                               Query Match
0.3%; Score 15.8; D
Best Local Similarity 89.5%; Pred. No. 91;
Matches 17; Conservative 0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     20 bp
Sequence 5 from patent US 6589726.
AR352007.1 GI:33756966
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1. .20
/organism="unknown"
/mol_type="genomic DNA"
                                                                                                                                                                                                                                                        /mol_type="genomic DNA"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1. .20
/organism="unknown"
                                                                                                                                                                                                                                         /organism="unknown"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     3920 ATGGCTCTCTGGTTGGCTG 3938
                                                                                                                                                                                                                                                                                                                                             3920 AIGGCICICICIGGIIGGCIG 3938
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1 Aresecretestreacts 19
                                                                                                                                                                                                                                                                                                                                                                           1 Arescercrecricacre 19
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AR254543.1 GI:27303431
                                                                     AR241587.1 GI:27287296
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Unknown.
Unclassified.
                                                                                                                    Unknown.
Unclassified.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Unknown.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Unknown.
                                                                                                   Unknown.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Query Match
Best Local S
Matches 17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           DEFINITION
ACCESSION
VERSION
KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  DEFINITION
ACCESSION
VERSION
KEYWORDS
                                                                                                                                                                                                                              source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TITLE
JOURNAL
FEATURES
RESULT 113
AR241587
LOCUS
DEFINITION
ACCESSION
VERSION
                                                                                                                                                                                                                                                                                                                                                                                                                         RESULT 114
AR254543
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  RESULT 115
                                                                                                                                                               AUTHORS
TITLE
JOURNAL
FEATURES
                                                                                                                      ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         REFERENCE
AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        JOURNAL
                                                                                                                                                    REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AR352007
                                                                                      KEYWORDS
SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ð
                                                                                                                                                                                                                                                                                                                                                  ò
                                                                                                                                                                                                                                                                                                                                                                           엄
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Denoet, C.F. and Watt, A.T.

Bennett, C.F. and Watt, A.T.

Antisense modulation of tumor necrosis factor receptor 2 expression Patent: US 6410334-A 138 25-UNN-2002;

Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  PAT 25-SEP-2002
                                                                                                                                                                                                                                                                                         PAT 20-JUN-2002
                                                                                                                                                      ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Gaps
                                                                                                                                                                                                                                                                                                                                                                                                               1 (bases 1 to 20)
Monia, B.P. and Wyatt,J.
Antisense inhibition of Phosphorylase kinase beta expression
Patent: 18 5368856-A 36 09-APR-2002;
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ö
                                                                                                                                                       ;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Query Match
0.3%; Score 15.8; DB 1; Length 20;
Best Local Similarity 89.5%; Pred. No. 91;
Matches 17; Conservative 0; Mismatches 2; Indels
                                                                                                                      0.3%; Score 15.8; DB 1; Length 20; 89.5%; Pred. No. 91; ative 0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 DB 1; Length 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    linear
                                                                                                                                                                                                                                                                                            linear
    and Kamb, A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AR215823 20 bp D1
Sequence 138 from patent US 6410324.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Ouery Match 0.3%; Score 15.8; D
Best Local Similarity 89.5%; Pred. No. 91;
Matches 17; Conservative 0; Mismatches
                                                                                                                                                                                                                                                                                       Sequence 36 from patent US 6368856.
    Skolnick, M.H., Cannon-Albright, L.A. Germline mutations in the MTS gene Patent: US 5624819-A 8 29-ARR-1997; Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   /mol_type="unassigned DNA"
                                                                                        /mol_type="unassigned DNA"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1. .20
/organism="unknown"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1. .20
/organism="unknown"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       4489 CAGAAAGTAGGACCAAGTG 4507
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             3672 TCTTACATACAGCCGAATT 3690
                                                                                                                                                                                       4079 GGTTCCAGTTGCCAATTTC 4097
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             20 CAGCAAGTAGGAGCAAGTG 2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TCTTGCATACAGGCGAATT 1
                                                                                                                                                                                                       20 GCTTCCAGTTTCCAATTTC 2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AR215823.1 GI:23314079
                                                                                                                                                                                                                                                                                                                                        AR205352.1 GI:21502914
                                                                                                                        Query Match
Best Local Similarity 89.5'
Matches 17; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Unknown.
Unclassified.
                                                                                                                                                                                                                                                                                                                                                                                                   Unclassified.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AR215823
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Unknown.
                                                                                                                                                                                                                                                                                                                                                                      Unknown.
                                                                                                                                                                                                                                                                                                                                                                                        Unknown
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  DEFINITION
ACCESSION
VERSION
KEYWORDS
                                                                                                                                                                                                                                                                                            LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      source
                                                                     source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                       KEYWORDS
SOURCE
ORGANISM
                                                                                                                                                                                                                                                                RESULT 111
AR205352/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AR215823/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TITLE
JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         RESULT 112
                                                                                                                                                                                                                                                                                                                                                                                                                                               TITLE
JOURNAL
                                                                                                                                                                                                                                                                                                                            ACCESSION
VERSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AUTHORS
                                    JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                   REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                  AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             g
```

Gaps

PAT 06-AUG-2001

AUTHORS TITLE

REFERENCE

셤

```
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Daly, M., Hudson, T.J., Lander, E.S., Rioux, J. and Siminovitch, K. Ibd-related polymorphisms
Patent: WO 0142511-A 1782 14-JUN-2001;
WHITEHEAD INSTITUTE FOR BIOMEDICAL RESEARCH (US); Ellipsis
Biotherapeutics Corporation (CA)
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Unclassified.

1 (bases 1 to 21)
Cohen, D., Chumakov, I. and Blumenfeld, M.
Biallelic markers for use in constructing a high density
disequilibrium map of the human genome
Patent: US 6537751-A 8727, 25-MAR-2003;
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Query Match 0.3%; Score 15.8; DB 1; Length 20; Best Local Similarity 85.0%; Pred. No. 91; Matches 17; Conservative 0; Mismatches 3; Indels
                                                                                                                                                                                                                                  0.3%; Score 15.8; DB 1; Length 20; 89.5%; Pred. No. 91; tive 0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              linear
                                                                                                                                                                                                                                                                                                                                                                                                                             linear
                                                                                                                                                                                                                                                                                                                                                                                                                             DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       21 bp DN.
Sequence 8727 from patent US 6537751.
AR296992
                                                                                                                                                                                                                                                                                                                                                                                                                            AX184029 20 bp D)
Sequence 1782 from Patent WO0142511.
AX184029
AX184029.1 GI:15135365
                                                                               1 (bases 1 to 20)
Carson, D.A. and Nobori, T.
Cyclin dependent kinese 4 inhibitor
Patent: US 6689864-A 6 10-FEB-2004;

    .20
    /organism="Homo sapiens"
    /mol_type="unassigned DNA"
    /db_xref="taxon:9606"

                                                                                                                                                                                  /organism="unknown"
/mol_type="genomic DNA"
                                                                                                                                                  Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1. .21
/organism="unknown"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           5025 AAAAAAAAAAAAAAAA 5044
                                                                                                                                                                                                                                                                                                         4079 GGTTCCAGTTGCCAATTTC 4097
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1 AAAAAGAAAANAAAGAAAA 20
                                                                                                                                                                                                                                                                                                                            20 GCTTCCAGTTTCCAATTTC 2
 AR474038.1 GI:42712791
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AR296992.1 GI:31684276
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Homo sapiens (human)
                                                                                                                                                                                                                                                       Best Local Similarity 89.5
Matches 17; Conservative
                                                                 Unclassified.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Unknown.
                                 Unknown.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Unknown
                                                                                                                                                                                                                                       Query Match
                                                                                                                                                                        source
                                                                                                                                                                                                                                                                                                                                                                                                                                          DEFINITION
ACCESSION
VERSION
KEYWORDS
SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            DEFINITION
ACCESSION
VERSION
KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                          RESULT 119
AX184029
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Bource
                                                                                                                 TITLE
JOURNAL
FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             RESULT 120
AR296992
                                                 ORGANISM
                                                                                 REFERENCE
AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TITLE
JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 JOURNAL
FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 REFERENCE
AUTHORS
VERSION
KEYWORDS
SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TITLE
                                                                                                                                                                                                                                                                                                                                       셤
                                                                   ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ö
                                                                                                                                                                                                                      PAT 20-FEB-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       PAT 20-FEB-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Gaps
                                                                    Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1 (bases 1 to 20)
Carson, D.A. and Nobori, T.
Tumor suppressor gene and methods for detection of cancer,
monitoring of tumor progression and cancer treatment
Patent: US 6689561-A 6 10-FBB-2004;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                .;
0
                                                                   ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             0.3%; Score 15.8; DB 1; Length 20; ilarity 89.5%; Pred. No. 91; Conservative 0; Mismatches 2; Indels
                                 DB 1; Length 20;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                DB 1; Length 20;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      linear
                                                                                                                                                                                                                      linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   linear
                                                                   Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  IndelB
                                                                                                                                                                                                                                                                                                                                                       1 (bases 1 to 20)
Buechler,J., Valkirs,G., Gray,J. and Lonberg,N.
Human antibodies as diagnostic reagents
Patent: US 6680209-A 4 20-JAN-2004;
Location/Qualifiers
                            Query Match 0.3%; Score 15.8; D
Best Local Similarity 89.5%; Pred. No. 91;
Matches 17; Conservative 0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Query Match 0.3%; Score 15.8; 1
Best Local Similarity 89.5%; Pred. No. 91;
Matches 17; Conservative 0; Mismatches
                                                                                                                                                                                                              Sequence 4 from patent US 6680209.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 20 bp
Sequence 6 from patent US 6689864.
AR474038
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AR473568 20 bp
Sequence 6 from patent US 6689561.
                                                                                                                                                                                                                                                                                                                                                                                                                                            1. .20
/organism="unknown"
/mol_type="genomic DNA"
/mol_type="genomic DNA"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1. .20
/organism="unknown"
/mol_type="genomic DNA"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Location/Qualifiers
                                                                                                 4769 TGACTGACTGACTAAATGA 4787
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                4079 GGTTCCAGTTGCCAATTTC 4097
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                366 CCTCCACCAACAGCCCATC 384
                                                                                                                    2 TGACTGACTGACTGACTGA 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CCTCCACCAAGGGCCCATC 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 SCTTCCAGTTTCCAATTTC 2
                                                                                                                                                                                                                                                                     AR454044.1 GI:42686891
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AR473568.1 GI:42711893
                                                                                                                                                                                                                                                                                                                                       Unclassified.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Unclassified.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Query Match
Best Local Similarity
Matches 17; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AR473568
                                                                                                                                                                                                                                                                                                   Unknown.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Unknown.
                                                                                                                                                                                                                                                                                                                         Unknown
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Unknown
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                19
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ACCESSION
VERSION
KEYWORDS
SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AR473568/c
LOCUS
DEFINITION
                                                                                                                                                                                                                                                                  VERSION
KEYWORDS
SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                               Bource
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Bource
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    DEFINITION
ACCESSION
                                                                                                                                                                                                                                  DEFINITION
                                                                                                                                                                                RESULT 116
AR454044/c
LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AR474038/c
LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                          JOURNAL
FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     RESULT 117
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    RESULT 118
```

a

ö

**Gap**в

ö

REFERENCE AUTHORS TITLE

JOURNAL FEATURES

g

PAT 12-JUN-2003

PAT 14-JUN-2002

```
Brinkmann, U. and Hoffmeyer, S.
Polymorphisms in human genes of cardiovascular regulators and their use in diagnostic and therapeutic applications
Patent: WO 0224747-A 373 28-MAR-2002;
Epidauros Biotechnologie AG (DE)
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Brinkmann, U. and Hoffmeyer, S.
Polymorphisms in human genes of cardiovascular regulators and their use in diagnostic and therapeutic applications
Patent: WO 0224/47-A 374 28-MAR.2002;
Epidauros Biotechnologie AG (DE)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               21;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Length 21;
                                                                                                           linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 7
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           0.3%; Score 15.8; DB 1;
39.5%; Pred. No. 91;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1,
                                                                                                                                                                                                                                                                                                                                                                                                  /organism="synthetic construct"
/mol type="unassigned DNA"
| DA zref="taxon:32630"
/note="artificial sequence"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1. .21
/organism="synthetic construct"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  DNA
                                                                                                           DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       other sequences; artificial sequences.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 B
                                                                                                                                                                                                                                     other sequences; artificial sequences
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       /mol_type="unassigned DNA"
/db_xref="taxon:32630"
/note="artificial sequence"
                                                                                                  21 bp I
Sequence 373 from Patent W00224747.
AX404547
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        21 bp I
Sequence 374 from Patent WO0224747.
AX404548
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 0.3%; Score 15.8; Ilarity 89.5%; Pred. No. 91; Conservative 0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AX642667 21 bp I
Sequence 13 from Patent WO02088180.
AX642667
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     4515 CCCTCGAAGGGGCCCAGAG 4533
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       4515 CCCTCGAAGGGGCCCAGAG 4533
                  21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           3 CCTCGATGTGGCCCAGAG 21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         19 cccrceargredcccagae 1
                                                                                                                                                               AX404547.1 GI:21437828
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AX404548.1 GI:21437829
CAGTTGTGTCCCATTGTCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Query Match 0.3%;
Best Local Similarity 89.5%;
                                                                                                                                                                                                 synthetic construct
synthetic construct
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     synthetic construct
synthetic construct
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 17; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     17;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AX642667
LOCUS
DEFINITION
ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                      source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          RESULT 124
AX404548/c
LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           source
                                                                                                                            DEFINITION
                                                                                                                                                                                                                    ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ORGANISM
                                                                       RESULT 123
AX404547
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Best Loc
Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              RESULT 125
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Matches
                                                                                                                                                                                                                                                                                                                               JOURNAL
                                                                                                                                            ACCESSION
                                                                                                                                                                                                                                                         REFERENCE
                                                                                                                                                                                                                                                                         AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   VERSION KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                JOURNAL
                                                                                                                                                                                 KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                  FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    FEATURES
                                                                                                                                                             VERSION
                                                                                                                                                                                                                                                                                             TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TITLE
                                                                                                                                                                                                 SOURCE
                                                                                                          LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         g
                                                                       ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  °,
                                                                                                                                                                                                                                      PAT 31-MAY-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            PAT 31-MAY-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Eukaryota, Metazoa, Chordata, Craniata, Vertebrata, Euteleostomi,
Mammalia, Eutheria, Rodentia, Sciurognathi, Muridae, Murinae, Mus.
                                                                       Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Gaps
                                                                                                                                                                                                                                                                                                                                                                                                Wolf, E., Werner, S., Halle, J.P., Regenbogen, J. and Goppelt, A. Use of polyeptides or their encoding nucleic acids for the diagnosis or treatment of skin diseases and their use in indentifying pharmacologically acitve substances Patent: BP 1114862-A 66 11-701-2001; Switch Biotech Aktiengeeellschaft (DE)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Wolf, E., Werner, S., Halle, J.P., Regenbogen, J. and Goppelt, A. Use of polyeptides or their encoding nucleic acids for the diagnosis or treatment of skin diseases and their use in indentifying pharmacologically acitve substances Patent: EP 114862-A 88 11-JUL-2001; Switch Biotech Akriengesellschaft (DE) Location/Qualifiers
                                                                       ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Query Match 0.3%; Score 15.8; DB 1; Length 21; Best Local Similarity 89.5%; Pred. No. 91; Matches 17; Conservative 0; Mismatches 2; Indels
                                   Length 21;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           DB 1; Length 21;
                                                                                                                                                                                                                                      linear
                                                                       Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            linear
                                     1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1. .21
/organism="synthetic construct"
                                                                                                                                                                                                                                      DNA
                                                                                                                                                                                                                                                                                                                          synthetic construct
synthetic construct
other sequences; artificial sequences.
                                     В
                                   Score 15.8; D
Pred. No. 91;
0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Pred. No. 91;
0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   /mol_type="unassigned DNA"
/db_xref="taxon:32630"
/note="Universal primer"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      /organism="Mus musculus"
/mol_type="unassigned DNA"
/db_xref="taxon:10090"
                                                                                                                                                                                                                                                Sequence 66 from Patent EP1114862.
AX140444
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Query Match
0.3%; Score 15.8;
Best Local Similarity 89.5%; Pred. No. 91
Matches 17; Conservative 0; Mismatche
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AX140446 21 bp
Sequence 68 from Patent EP1114862.
   /mol_type="genomic DNA"
                                                                                                                                                                                                                                      21 bp
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Location/Qualifiers
                                                                                                          4736 TITICAAAATTAIGICICC 4754
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               3258 CATTIGIGICCCTTIGICA 3276
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    3258 CATTTGTGTCCCTTTGTCA 3276
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Mus musculus (house mouse)
                                                                                                                                3 TTTTCAAAATGATGTCCCC 21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   cagridrerecearierea 21
                                                                                                                                                                                                                                                                                          AX140444.1 GI:14280586
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AX140446.1 GI:14280588
                                  ch 0.3%;
1 Similarity 89.5%;
17; Conservative 0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Mus musculus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AX140446
                                                                                                                                                                                                                                      AX140444
                                   Query Match
                                                        Best Local
                                                                                                                                                                                                                                   LOCUS
DEFINITION
ACCESSION
VERSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      RESULT 122
AX140446
LOCUS
                                                                      Matches
                                                                                                                                                                                                                                                                                                                                                 ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ORGANISM
                                                                                                                                                                                                 RESULT 121
```

AUTHORS TITLE

JOURNAL

FEATURES

REFERENCE

KEYWORDS SOURCE

AX140444

용

ô

Gaps

ö

PAT 14-JUN-2002

ö

Gaps

ö

AUTHORS TITLE

JOURNAL

FEATURES

REFERENCE

ACCESSION

원 ò

VERSION KEYWORDS

SOURCE

PAT 21-FEB-2003

gibbs-10-667-022-4.rge

ORGANISM

VERSION KEYWORDS SOURCE

REFERENCE AUTHORS TITLE

JOURNAL

FEATURES

```
Wolf.E. Werner, S., Halle, J.P., Regenbogen, J. and Goppelt, A.
Use of polypeptides for diagnosis or remedy of dermatology diseases
or nucleic acids encoding the same, and use thereof for
identification of pharmacologically active substances
of patent: JP 2001292783-A 8 23-OCT-2001;
SWITCH BIOTECH AG
OS Artificial Sequence
PN JP 2001292783-A/8
PD 23-OCT-2001
PF 17-NOV-2000 JP 2000351811
PR 17-NOV-1999 DE 19955349.1,17-DEC-1999 US 172511 PR
20-JUN-2000 DE 10030149.5
PI BCKARD WOLF, SABINE WERNER, JOERN PETER HALLE, JOHANNES PI
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    SM Mus musculus (Acoust Mouse)

Bukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;

Bukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;

Bukaryota; Metazoa; Chordata; Sciurognathi; Muridae; Murinae; Mus.

Canolia; Euteria; Rodentia; Sciurognathi; Muridae; Mus.

Soliasea 1 to 21)

Wolf, E., Werner, S., Halle, J.P., Regenbogen, J. and Goppelt, A.

Use of polypeptides for diagnosis or remedy of dermacology diseases

of nucleic acids encoding the same, and use thereof for identification of pharmacologically active substances

Extract Sp. 2001292783-A 10 23-OCT-2001;

SWITCH BIOTECH AG

OS Mus musculus (mouse)

PR 17-NOV-2000

PP 17-NOV-2000

PP 17-NOV-2000

PP 17-NOV-1999 DE 19955349.1,17-DEC-1999 US 172511 PR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  BD079124

21 bp DNA linear PAT 27-AUG-2002 Use of polypeptides for diagnosis or remedy of dermatology diseases or nucleic acids encoding the same, and use thereof for identification of pharmacologically active substances.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 GOIN33/50,GOIN33/50,GOIN33/53,GOIN33/53,GOIN33/566,GOIN33/577// PC (CL2N5/10,CL2R1:91),CL2N15/00,AGIK37/02,CL2N5/00,CL2N15/00, PC (CL2N5/00,CL2R1) Artificial Sequence: Universal Primer FH Key Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                 CI2NI5/09,A01K67/027,A61K31/713,A61K38/00,A61K39/395,A61K39/
395,A61K48/00,
A61P17/02,C07K14/47,C07K16/18,C07K16/40,C12M1/00,C12N5/10, PC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        C12N9/02, C12N9/16, C12N15/02, C12P21/02, C12P21/08, C12Q1/68, PC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ECKARD WOLF, SABINE WERNER, JOERN PETER HALLE, JOHANNES PI
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        /organism='Artificial Sequence'
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               DB 1; Length 21;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          PF 17-NOV-2000 JP 2000351811
PR 17-NOV-1999 DE 19955349.1,17-DEC-1999 US
20-JUN-2000 DE 10030149.5
PI ECKARD WALL CARRELL

    .21
    ^organism="synthetic construct"
/mol_type="genomic DNA"
/db_xref="taxon:32630"

                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Pred. No. 91;
0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  0.3%; Score 15.8;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     3258 CATITGIGICCCTITGICA 3276
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            JP 2001292783-A/10.
Mus musculus (house mouse)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   3 cagriererecearierea 21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        BD079124
BD079124.1 GI:22624727
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       89.58;
                                                                                                                                                                                                                                                                                                                                                                                            ANDREAS GOPPELT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Best Local Similarity
Matches 17; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              REGENBOGEN,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   G01N33/15,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               C12N9/
PC C1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     LOCUS
DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ACCESSION
VERSION
KEYWORDS
SOURCE
ORGANISM
                                AUTHORS
TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 RESULT 128
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        REFERENCE
AUTHORS
TITLE
        REFERENCE
                                                                                                                                 JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            BD079124
                                                                                                                                                                                    COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ઠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              a
                                                                                                                                                                       Halle, J.P., Goppelt, A. and Hof, P.
Use of alpha 1-antichymotrypsin polypeptides or nucleic acids
encoding them, or of a cell which is expressing an act polypeptide,
or a nucleic acid encoding it, for treatment and/or prevention of
diabetes-associated and/or arterial poorly healing wounds and for
identifying pharmacologically active substances
Patent: WO 0208180-A is 07-NOV-2002;
Switch Biotech GmbH (DE)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Use of polypeptides for diagnosis or remedy of dermatology diseases or nucleic acids encoding the same, and use thereof for identification of pharmacologically active substances.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           PAT 23-JUN-2003
                                                                                                      Eukaryota, Metazoa, Chordata, Craniata, Vertebrata, Euteleostomi,
Mammalia, Eutheria, Rodentia, Sciurognathi, Muridae, Murinae, Mus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Query Match 0.3%; Score 15.8; DB 1; Length 21; Best Local Similarity 89.5%; Pred. No. 91; Matches 17; Conservative 0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Length 21;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         IndelB
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Kadler, K.E. and Bulleid, N.J.
Modified peptides and their uses
Patent: WO 03035692-A 4 01-MAY-2003;
THE VICTORIA UNIVERSITY OF MANCHESTER (GB)
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        DB 1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1. .21
/organism='synthetic construct"
/mol_type="unassigned DNA"
/db_xref="taxon:32630"
/noTe="Primer"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             other sequences; artificial sequences.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            other sequences; artificial sequences.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   0.3%; Score 15.8; D
89.5%; Pred. No. 91;
ive 0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       /mol_type="unassigned DNA"
/db_xref="taxon:10090"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sequence 4 from Patent WO03035692.

    .21
    /organism="Mus musculus"

                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           21 bp
                                                                                                                                                                                                                                                                                                                                                                                            Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       3258 CATTTGTGTCCCTTTGTCA 3276
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1876 GCCTTGAGGACGTTGACCA 1894
                                                     Mus musculus (house mouse)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       3 CAGTIGIGICCCATIGICA 21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        sccrrcascrccrrcacca 3
     AX642667.1 GI:28474969
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     BD079122.1 GI:22624725
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AX754893.1 GI:32167321
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           JP 2001292783-A/8.

synthetic construct

synthetic construct
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          synthetic construct
synthetic construct
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Conservative
                                                                              Mus musculus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Best Local Similarity
Matches 17; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AX754893
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AX754893
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                BD079122
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         BD079122
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Query Match
```

AX754893/c LOCUS

RESULT 126

DEFINITION ACCESSION VERSION KEYWORDS SOURCE

ORGANISM

REFERENCE AUTHORS JOURNAL

FEATURES

ö

Gaps

diseases

RESULT 127 BD079122 LOCUS

셤

DEFINITION

VERSION KEYWORDS SOURCE ORGANISM

ACCESSION

Gaps

; 0

Indels

Length 17;

PAT 07-SEP-2001

linear

RNA

```
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Buteleostomi;
Mammalia; Butheria; Rodentia; Sciurognathi; Muridae; Musinae; Mus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Blatt, L., Mcswiggen, J. and Chowrira, B.M.
Method and reagent for the modulation and diagnosis of cd20 and nogo gene expression
patent: WO 0153103-A 963 16-AUG-2001;
RIBOZYME PHARMACEUTICALS, INC. (US); Blatt, Lawrence (US);
McSwiggen, James (US); Chowrira, Bharat M. (US)
Location/Qualifiers
                                                                           Blatt, L., Mcswiggen, J. and Chowrira, B.M.
Method and reagent for the modulation and diagnosis of cd20 and nogo gene expression
Patent: WO 0159103-A 962 16-AUG-2001;
RIBOZYME PHARMACEUTICALS, INC. (US); Blatt, Lawrence (US);
McSwiggen, James (US); Chowrira, Bharat M. (US)
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                0.3%; Score 15.4; DB 1;
llarity 94.1%; Pred. No. 97;
Conservative 0; Mismatches 1;
                                                                                                                                                                                                                                                                                                                     Match 0.3%; Score 15.4; DB 1; Local Similarity 94.1%; Pred. No. 97; les 16; Conservative 0; Mismatches 1;
                                                                                                                                                                                                            1. .17 /organism="synthetic construct" /organism=synthetic construct" /mol.type="unassigned RNA" /db xref="taxon:32630" /note="Nucleic Acid"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        /organism="synthetic construct"
/mol type="unassigned RNA"
lob xref="taxon:32630"
/nofe="Nucleic Acid"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Sequence 2382 from Patent WO03025176. AX724695.1 GI:30504038
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      synthetic construct
synthetic construct
other sequences; artificial sequences.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Telerman, A., Amson, R. and Tuijnder, M.
                                            other sequences; artificial sequences.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AX215521 17 bp F
Sequence 963 from Patent WO0159103.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Mus musculus (house mouse)
Mus musculus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1578 TICIGCAGAIGAGCGIA 1594
                                                                                                                                                                                                                                                                                                                                                                                                1579 TCTGCAGATGAGCGTAT 1595
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AX215521.1 GI:15525564
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                17 rrcreckeageagera
                                                                                                                                                                                                                                                                                                                                                                                                                                     17 rcrecadadeacerar
             synthetic construct
synthetic construct
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Local Similarity
nes 16; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Query Match
                                                                                                                                                                                                                                                                                                                               Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                KEYWORDS
SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          DEFINITION
                                                                                                                                                                                                                       source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AX724695/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AX215521/c
LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Best Loca
Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          RESULT 132
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ACCESSION
VERSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        REFERENCE
AUTHORS
                 SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                Best Loca
Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 RESULT 131
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AUTHORS
TITLE
                                                                   REFERENCE
AUTHORS
TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     VERSION
KEYWORDS
                                                                                                                                            JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               FEATURES
KEYWORDS
                                                                                                                                                                                                  FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                       셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        PAT 07-SEP-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ö
                                                                                                                                                                                                      ပ္ပ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  PAT 07-SEP-2001
                                                                                                                                PC

GO1N33/50, GO1N33/50, GO1N33/53, GO1N33/53, GO1N33/566, GO1N33/577// PC

(C12NS/10, C12R1:91), C12N15/00, A61K37/02, C12N5/00, C12N15/00, PC

(C12NS/00, C12R1:91)

CC Use of polypeptides for diagnosis or remedy of dermatology CC

diseases or
                                                   A61P17/02, C07K14/47, C07K16/18, C07K16/40, C12M1/00, C12N5/10, PC
C12N15/09,A01K67/027,A61K31/713,A61K38/00,A61K39/395,A61K39/
395,A61K48/00,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Blatt,L., Mcswiggen,J. and Chowrira,B.M. Method and reagent for the modulation and diagnosis of cd20 and
                                                                                        C12N9/02, C12N9/16, C12N15/02, C12P21/02, C12P21/08, C12Q1/68,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Gaps
                                                                                                                                                                                                                                          ပ္ပ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   nogo gene expression
Patent: WO 015103-A 63 16-AUG-2001;
RIBOZYME PHARMACEUTICALS, INC. (US); Blatt, Lawrence (US)
MCSwiggen, James (US); Chowrira, Bharat M. (US)
Location/Qualifiers
                                                                                                                                                                                                                                     nucleic acids encoding the same, and use thereof for identification of
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ö
                                                                                                                                                                                                                                                                                                                                 /organism='Mus musculus (mouse)'.
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Length 17,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                DB 1; Length 21;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             DB 1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  /organism="synthetic construct"
/mol_type="unassigned RNA"
/db_xref="taxon:32630"
/nofe="Nucleic Acid"
                                                                                                                                                                                                                                                                               pharmacologically active substances
Key Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               RNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      RNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 other sequences; artificial sequences
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        17 bp 1
Sequence 962 from Patent WO0159103.
AX215520
AX215520.1 GI:15525563
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Query Match
0.3%; Score 15.4; D
Best Local Similarity 94.1%; Pred. No. 97;
Matches 16; Conservative 0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                0.3%; Score 15.8; D
89.5%; Pred. No. 91;
iive 0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AX214621
Sequence 63 from Patent WO0159103.
                                                                                                                                                                                                                                                                                                                                                                                       /organism="Mus musculus"
/mol_type="genomic DNA"
/db_xref="taxon:10090"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         3258 CATTTGTGTCCCTTTGTCA 3276
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1577 TTTCTGCAGATGAGCGT 1593
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CAGTIGIGICCCALIGICA 21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AX214621
AX214621.1 GI:15524664
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TTTCTGCAGAGGAGCGT 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               synthetic construct
synthetic construct
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Query Match
Best Local Similarity 89.5
Matches 17; Conservative
                                                                                                                                                                                                                                                                                                                         source
                                                                                                PC C12N9/
G01N33/15,
                                                                                C12N9/00,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       17
                                                                                                                                                                                                                                                S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               RESULT 130
AX215520/c
LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 DEFINITION
ACCESSION
VERSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           source
                                                                                                                                                                                                                                                                                                                                                                                 source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AX214621/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ACCESSION
VERSION
KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       RESULT 129
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      FEATURES
                                                                                                                                                                                                                                                                                                                                                              FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              셤
```

PAT 08-MAY-2003

linear

ö

Gaps

ö

1; Indels

Length 17;

37

ö

source

PEATURES

JOURNAL

TITLE

```
PAT 25-JUN-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               PAT 18-MAR-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1. .10
/note="upstream amplification primer 99-28352 for SEQ 151"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Eukaryota, Metazoa, Chordata, Craniata, Vertebrata, Euteleostomi,
Mammalia, Eutheria, Primates, Catarrhini, Hominidae, Homo.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Cohen,D., Blumenfeld,M., Chumakov,I., Abderrahim,H. and Bihain,B. Obesity associated biallelic marker maps Patent: WO 0206525-A 322 24-JAN-2002; GENSET (FR)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Gaps
                                                                                                                              Gapa
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Telerman, A., Amson, R. and Tuijnder, M.
Sequences involved in tumoral suppression, tumoral reversion,
apoptosis and/or viral resistance phenomena and their use as
                                                                                                                           ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ô
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ö
                                                                               Query Match

0.3%; Score 15.4; DB 1; Length 17;
Best Local Similarity 94.1%; Pred. No. 97;
Matches 16; Conservative 0; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   0.3%; Score 15.4; DB 1; Length 18; 94.1%; Pred. No. 98; vo. 0; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Length 17;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               linear
                                                                                                                                                                                                                                                                                                                     linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       IndelB
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             DB 1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Patent: WO 03040369-A 3120 15-MAY-2003;
Molecular Engines Laboratories (FR)
Location/Qualifiers
                                                                                                                                                                                                                                                                                                    AX759799 17 bp DNA
Sequence 3120 from Patent WO03040369.
AX759799
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Query Match 0.3%; Score 15.4; I
Best Local Similarity 94.1%; Pred. No. 97;
Matches 16; Conservative 0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AX378533 18 bp C
Sequence 322 from Patent WO0206525.
AX378533
                      /mol_type="unassigned DNA"
/db_xref="taxon:9606"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     organism="Homo sapiens"
/mol_type="unassigned DNA"
/db_xref="taxon:9606"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         /organism="Homo sapiens"
/mol_type="unassigned DNA"
/db_xref="taxon:9606"
1. .18
  /organism="Homo sapiens"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Location/Qualifiers
                                                                                                                                                                   1332 IGTACCATTATTTGATC 1348
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               3061 GATCTTGTTAAAACCAA 3077
                                                                                                                                                                                                                                                                                                                                                                                 AX759799.1 GI:32254415
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AX378533.1 GI:19574386
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1 GATCTTGTCAAAACCAA 17
                                                                                                                                                                                                             17 reracertrarrigare 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             94.18;
                                                                                                                                                                                                                                                                                                                                                                                                                         Homo sapiens (human)
Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Homo sapiens (human)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Query Match 0.3
Best Local Similarity 94.1
Matches 16; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 medicines
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         primer bind
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ACCESSION
VERSION
KEYWORDS
SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                   DEFINITION
ACCESSION
VERSION
                                                                                                                                                                                                                                                                         RESULT 135
AX759799
LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       RESULT 136
AX378533
                                                                                                                                                                                                                                                                                                                                                                                                                           SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           REFERENCE
AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                       KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 LOCUS
                                                                                                                                                                     ò
                                                                                                                                                                                                           유
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     셤
                                                                                                                                                                                                                                                                           ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     PAT 08-MAY-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 PAT 25-JUN-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Eukaryota, Metazoa, Chordata, Craniata, Vertebrata, Euteleostomi,
Mammalia, Eutheria, Rodentia, Sciurognathi, Muridae, Murinae, Mus.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Eukaryota, Metazoa, Chordata, Craniata, Vertebrata, Buteleostomi,
Mammalia, Butheria, Primates, Catarrhini, Hominidae, Homo.
                                                                                                                                                                                                                                                                              Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Gaps
Sequences involved in phenomena of tumour suppression, tumour reversion, apoptosis and/or virus resistance and their use as
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Telerman, A., Amson, R. and Tuijnder, M. Sequences involved in phenomena of tumour suppression, tumour reversion, apoptosis and/or virus resistance and their use as
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Telerman, A., Amson, R. and Tuijnder, M. Sequences involved in tumoral suppression, tumoral reversion, apoptosis and/or viral resistance phenomena and their use as
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ö
                                                                                                                                                                                                                                                                           ö
                                                                                                                                                                                                                                   DB 1; Length 17;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               DB 1; Length 17;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   linear
                                                                                                                                                                                                                                                                           Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Indels
                                                         Patent: WO 03025176-A 2382 27-MAR-2003;
Molecular Engines Laboratories (FR)
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          medicines
Patent: WO 03025176-A 5330 27-MAR-2003;
Molecular Engines Laboratories (FR)
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AX727643 17 bp DNA Sequence 5330 from Patent W003025176. AX727643
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Patent: WO 03040369-A 110 15-MAY-2003;
Molecular Engines Laboratories (FR)
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 17 bp Di
Sequence 110 from Patent WO03040369.
                                                                                                                                                                                                                               Query Match
0.3%; Score 15.4; Di
Best Local Similarity 94.1%; Pred. No. 97;
Matches 16; Conservative 0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           0.3%; Score 15.4; Dilarity 94.1%; Pred. No. 97; Conservative 0; Mismatches
                                                                                                                                                               /mol_type="unassigned_DNA"
/db_xref="taxon:10090"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               /mol_type="unassigned DNA"
/db_xref="taxon:10090"
                                                                                                                                               organism="Mus musculus"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         /organism="Mus musculus"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Mus musculus (house mouse)
                                                                                                                                                                                                                                                                                                                 1401 AAATAAAATTGAAGATC 1417
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AX727643.1 GI:30506986
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 960 GATCCTGACAGCTGTGG 976
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AX756789.1 GI:32251343
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1 GATCCTGAGAGCTGTGG 17
                                                                                                                                                                                                                                                                                                                                                           17 AAATAGAATTGAAGATC 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Homo sapiens (human)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Mus musculus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Query Match
Best Local Similarity
Matches 16; Conserv
                                       medicines
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 medicines
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ACCESSION
VERSION
KEYWORDS
SOURCE
ORGANISM
```

VERSION KEYWORDS SOURCE ORGANISM

REFERENCE AUTHORS TITLE

JOURNAL

FEATURES

RESULT 133 AX727643

ò 셤 DEFINITION

ACCESSION

ö

ö

source

FEATURES

JOURNAL

REFERENCE AUTHORS TITLE

AX756789/c LOCUS

RESULT 134

셤

DEFINITION

Gaps

.. 0

ઠે g

```
Labjane, A. and Suerbaum, S. Labjane, A. and Suerbaum, S. Indigue, A. and Suerbaum, S. Indigue, A. and Suerbaum, S. Indigue, A. and Suerbaum, S. Danger, Compositions and Durpertibes FOR USE IN THE COMPOSITIONS AND NUCLEIC ACID SEQUENCES ENCOING SALD POLTPEPTIDES
PACENT: WO 9426901-A 14 24-NOV-1994;
PASTEUR INSTITUT (FR); INST NAT SANTE RECH MED (FR)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  PAT 29-SEP-1999
                                                                                                                                                                         PAT 15-0CT-1999
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Labignes 1 to 20)
Labigne, A., Suerbaum, S., Ferrero, R.L. and Thiberge, J.-M.
Labigne, A., Suerbaum, S., Ferrero, R.L. and Thiberge, J.-M.
Immunogenic compositions against helicobacter infection,
polypeptides for use in the compositions, and nucleic acid
sequences encoling said polypeptides
patent: US 5843460-A 6 01-DEC-1998;
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      DB 1; Length 20;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           DB 1; Length 20;
Score 15.4; DB 1; Length 18; Pred. No. 98; 0; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      0.3%; Score 15.4; I 94.1%; Pred. No. 98; Live 0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             0.3%; Score 15.4; D
94.1%; Pred. No. 98;
cive 0; Mismatches

    20
    /organism="unidentified"
    /mol_type="unassigned DNA"
    /db_xref="taxon:32644"

                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       /mol_type="unassigned DNA"
                                                                                                                                                                         20 bp
Sequence 14 from Patent WO9426901.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AR061035 20 bp
Sequence 6 from patent US 5843460.
AR061035
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             /organism="unknown"
                                                                                                                                                                                                                                                                                                                                                                                                                 Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1800 TGAAATCCTTTTGGATC 1816
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1800 TGAAATCCTTTTGGATC 1816
                                                                  1896 AGTICTIGCTCTCGTCA 1912
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AR061035.1 GI:5988726
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       18 TGAATCTTTTGGATC 2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         0
    0.3%;
                                                                                  |||||||| |||||||
17 AGTTCTTGGTCTCGTCA 1
                                                                                                                                                                                                          A73298
A73298.1 GI:6064075
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         18 rgaaarcririrggarc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         16; Conservative
      Query Match
Best Local Similarity 94.1
Matches 16; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              16; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Unclassified.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Query Match
Best Local Similarity
                                                                                                                                                                                                                                                         unidentified
unidentified
unclassified.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Query Match
Best Local Similarity
Matches 16; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Unknown.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Unknown.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                        source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    RESULT 141
AR161668/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           RESULT 140
AR061035/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   REFERENCE
AUTHORS
TITLE
                                                                                                                                                                                             DEFINITION
                                                                                                                                                                                                                                                                           ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Matches
                                                                                                                                                                                                            ACCESSION
VERSION
KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                JOURNAL
                                                                                                                                                 RESULT 139
                                                                                                                                                                                                                                                                                                                                                                                        JOURNAL
                                                                                                                                                                                                                                                                                                          REFERENCE
                                                                                                                                                                                                                                                                                                                            AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       KEYWORDS
                                                                                                                                                                A73298/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                       FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       VERSION
                                                                                                                                                                                                                                                                                                                                          TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             엄
                                                                      ઠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                БС
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Treatment of bone loss with osteoblastoma precursor cells.
BD124158
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ö
                                                                                                                                     PAT 25-JUN-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               A61P19/00, A61P19/10, C07K14/51, C12N5/10, C12N15/09, A61K37/24,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Key
                                                                                                                                                                                                                                                                              Boshoff, C. Vaccines against kaposi's sarcoma-associated herpesvirus Vaccines against kaposi's sarcoma-associated herpesvirus Patent: WO 03014154-A 13 20-FEB-2003; University College London (GB) Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      .
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Description of Artificial Sequence: PCR primer FH
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        /organism='Artificial Sequence'
                                                                                                                                                                                                                                                                                                                                                                                                                                                     Query Match
0.3%; Score 15.4; DB 1; Length 18;
Best Local Similarity 94.1%; Pred. No. 98;
Matches 16; Conservative 0; Mismatches 1; Indels
                                                                                                                                       linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          organism="synthetic construct"
/mol_type="genomic DNA"
/db_xref="taxon:32630"
                                                                                                                                                                                                                                                                                                                                                             1. .18
/organism="synthetic construct"
/mol_type="unassigned DNA"
/db_xref="taxon:32630"
/note="PRIMBR"
                                                                                                                                                                                                                                                    other sequences; artificial sequences
                                                                                                                                     AX765627 18 bp 18 Sequence 13 from Patent WO03014154.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                . 18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1955 TTCTGCCAGGCATAGCC 1971
                             4144 CACCCTCTGTATCAGTC 4160
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                BD124158.1 GI:23219103
JP 2002502822-A/11.
                                                                                                                                                                      AX765627
AX765627.1 GI:32259820
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CACCCTTTGTATCAGTC 18
                                                                                                                                                                                                                   synthetic construct synthetic construct
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                synthetic construct
synthetic construct
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  C12N15/00
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 DEFINITION
ACCESSION
VERSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 KEYWORDS
SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      RESULT 138
BD124158/c
LOCUS
                                                                                                           RESULT 137
AX765627
LOCUS
                                                                                                                                                      DEFINITION
                                                                                                                                                                                                                                       ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TITLE
                                                                                                                                                                                                                                                                   REFERENCE
AUTHORS
TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AUTHORS
                                                                                                                                                                      ACCESSION
VERSION
                                                                                                                                                                                                                                                                                                                  JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   FEATURES
                                                                                                                                                                                                    KEYWORDS
                                                                                                                                                                                                                                                                                                                                                FEATURES
                                                                                                                                                                                                                        SOURCE
```

g

ö

Gaps

. 0

ö

Gaps

DEFINITION

Bource

RESULT 142

g ઠે

BD228503 LOCUS

TITLE

COMMENT

REFERENCE AUTHORS

JOURNAL FEATURES

REFERENCE AUTHORS TITLE

```
PAT 12-JUN-2003
                                                                                                    PAT 20-DEC-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     PAT 12-JUN-2003
                                                                                                                                                                                                                                     1 (bases 1 to 20)
Egholm,M., Nieleen,P., Buchardt,O., Dueholm,K.L., Christensen,L.,
Coull,J.M., Kiely,J. and Griffith,M.
Peptide nucleic acids
Patent: US 6451968-A 49 17-SEP-2002,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1 (bases 1 to 20)
Cohen, D., Chumakov, I. and Blumenfeld, M.
Biallelic markers for use in constructing a high density
disequilibrium map of the human genome
Patent: US 637751-A 6200 25-MAR-2003,
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                           0.3%; Score 15.4; DB 1; Length 20;
88.9%; Pred. No. 98;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Length 20;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     linear
                                                                                                      linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ï
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            0.3%; Score 15.4; DB 1;
94.1%; Pred. No. 98;
tive 0; Mismatches 1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Sequence 6200 from patent US 6537751.
                                                                                               20 bp I
Sequence 49 from patent US 6451968.
AR231312
                                                                                                                                                                                                                                                                                                                                                                                                                                              0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AR308288 20 bp
Sequence 6 from patent US 6555311.
AR308288
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        /organism="unknown"
/mol_type="genomic DNA"
                                                                                                                                                                                                                                                                                                                                                                             /mol_type="genomic DNA"
                                                                                                                                                                                                                                                                                                                            Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                               1. .20
/organism="unknown"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  5025 AAAAAAAAAAAAAA 5042
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                4356 GAAAATAAGGTTTTGGG 4372
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AR294465.1 GI:31681749
                                                                                                                                                    AR231312.1 GI:27272243
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     GI:31699681
 2 CCACAGAGGCTTCATC 18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  19 AAAAAAAAAAAAAA 2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    17 GAAATAATGTTTTGGG 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Unknown.
Unclassified.
1 (bases 1 to 20)
                                                                                                                                                                                                                                                                                                                                                                                                                                                16; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               16; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                           Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Unclassified.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Best Local Similarity
                                                                                                                                                                                                                     Unclassified
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AR308288.1
                                                                                                                                                                                    Unknown.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Unknown.
                                                                                                                                                                                                         Unknown.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Unknown.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Unknown
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Query Match
                                                                                                                                                                                                                                                                                                                                               Bource
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Bource
                                                                   RESULT 143
AR231312/c
LOCUS
                                                                                                                                                                                       SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     KEYWORDS
SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   RESULT 144
AR294465/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  RESULT 145
AR308288
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   DEFINITION
                                                                                                                    DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   DEFINITION
                                                                                                                                                                                                                                                                                        TITLE
JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                             Матсрев
                                                                                                                                    ACCESSION
VERSION
                                                                                                                                                                                                                                       REFERENCE
AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ACCESSION
VERSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       REFERENCE
AUTHORS
TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       JOURNAL
FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ACCESSION
VERSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        REFERENCE
                                                                                                                                                                       KEYWORDS
                                                                                                                                                                                                                                                                                                                            FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ઠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              셤
                                                                                                                                                                                                                                                                                                                                                               ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  BD228503 20 bp DNA linear PAT 17-JUL-2003 IL-17 homologous polypeptide and its application to remedy.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               unclassified.

1 (bases 1 to 20)

Chen, J., Filvaroff, E., Goddard, A., Gurney, A.L., Li, H. and Wood, W.I.

IL-17 homologous polypeptide and its application to remedy
Patent: JP 2002515246-A 98 28-MAY-2002;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ö
 PAT 17-0CT-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               LL-17 homologous polypeptide and its application to remedy FH
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        WILLIAM I WOOD
CI2N15/09,A61K38/21,A61K45/00,A61P19/00,C07K14/52,C07K16/24,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    OS Unidentified
PN JP 2002515246-A/98
PD 28-MAY-20002
PF 14-MAY-1999 JP 2000549734
PR 15-MAY-1998 US 60/085579,23-DEC-1998 US 60/113621 PI
JIAN CHEN, ELLEN FILVAROFF, AUDLEY GODDARD, AUSTIN L GURNEY, PI
                                                                                                                                                                                                                                                                                                                                                               Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             C12N1/19, C12N1/21, C12N5/10, C12P21/02, C12P21/08, C12Q1/00
                                                                                                                                Labigne, A., Suerbaum, S., Ferrero, R.L. and Thiberge, J.-M. Immunogenic compositions against helicobacter infection, polypeptides for use in the compositions, and nucleic acid sequences encoding said polypeptides
Patent: US 6258359-A 6 10-JUL-2001;
                                                                                                                                                                                                                                                                                                                                                               ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        DB 1; Length 20;
                                                                                                                                                                                                                                                                                                                            DB 1; Length 20;
     linear
                                                                                                                                                                                                                                                                                                                                                           1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Indele
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                /organism='Unidentified'. Location/Qualifiers
     DNA
                                                                                                                                                                                                                                                                                                                          Query Match
0.3%; Score 15.4; D
Best Local Similarity 94.1%; Pred. No. 98;
Matches 16; Conservative 0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     0.3%; Score 15.4; Di
34.1%; Pred. No. 98;
tve 0; Mismatches
                                                                                                                                                                                                                                                         1. .20
/organism="unknown"
/mol_type="unassigned DNA"
Sequence 6 from patent US 6258359. AR161668.1 GI:16228523
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1. .20
/organism="unidentified"
/mol_type="genomic DNA"
/db_xref="taxon:32644"
                                                                                                                                                                                                                                     Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        PI WILLIAM I WOOD
PC C12N15/09, A61K38/21, A611
PC C07K19/00,
PC C12N1/19, C12N1/21, C12N5,
C12Q1/68, C12N15/00,
PC A61K37/66, C12N5/00
CC Strandedness: Single,
CC Topology: Linear;
CC Topology: Linear;
CC Topology: Linear;
KEY
                                                                                                                                                                                                                                                                                                                                                                                             1800 TGAAATCCTTTTGGATC 1816
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        4586 CCACACAGGGCTTCATC 4602
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              BD228503
BD228503.1 GI:33038273
JP 2002515246-A/98.
                                                                                                                                                                                                                                                                                                                                                                                                                18 TGAAATCTTTTTGGATC 2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Query Match

Best Local Similarity 94.1%;
Matches 16; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      GENENTECH INC
                                                                                                                  Unclassified.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     unidentified
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          HANZHONG LI
                                                                                   Unknown.
                                                                                                  Unknown
                               ACCESSION
VERSION
KEYWORDS
SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            DEFINITION
ACCESSION
VERSION
KEYWORDS
SOURCE
ORGANISM
```

ö

Gaps

ö

ö

Gaps

ö

source

FEATURES

PAT 16-SEP-2000

linear

```
Bartholomeusz,A.I., Locarnini,S.A., Aye,T.T. and de Man,R. Viral variants and methods for detecting same patent: WO 9821317-A 6 22-MAY-1998; LOCARNINI STEPHEN ALISTER (BARTHOLOMEUSZ ANGELINE INGRID (AU); LOCARNINI STEPHEN ALISTER (; WESTERN HEALTH CARE NETWORK (AU); AYE THEIN THEIN (AU); MAN ROBERT A DE (AU)
                                                                                                                                                           Hepatitis B virus
Hepatitis B virus
Viruses; Retroid viruses; Hepadnaviridae; Orthohepadnavirus.
                                                                                                                                                                                                                                                                                                                                                                                                          Score 15.4; DB 1; Length 20; Pred. No. 98;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   0.3%; Score 15.4; DB 1; Length 20;
94.1%; Pred. No. 98;
                                                                                                                                                                                                                                                                                                                                                                                                                                            1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Zhang, Y., Moffatt, M., Cookson, W. and Tinsley, J.O.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Viral variants and methods for detecting same. BD009330 GT:18637703 GP 2001503277-A/6.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         /organism="synthetic construct"
/mol type="unassigned DNA"
/db_xref="taxon:32630"
/note="primer"
                                                                                DNA
                                                                                                                                                                                                                                                                                                                                             /organism="Hepatitis B virus"
/mol_type="unassigned DNA"
/db_xref="taxon:10407"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             other sequences; artificial sequences.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Patent: WO 03000727-A 156 03-JAN-2003;
ISIS INNOVATION LIMITED (GB)
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 20 bp Di
Sequence 156 from Patent WO03000727.
AX699215
                                                                                                                                                                                                                                                                                                                                                                                                                                            0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    0; Mismatches
                                                                            AX029045
Sequence 6 from Patent WO9821317.
AX029045
AX029045.1 GI:10190033
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   2636 ATGTCTACTGTAAACTG 2652
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            525 TTATATCCTAACCTTAC 541
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AX699215.1 GI:29499865
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1 CATCCTGCCTACTGACC 17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                17 Argreracrerakacae 1
                                                                                                                                                                                                                                                                                                                                                                                                                              94.1%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     94.18;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 synthetic construct
synthetic construct
                                                                                                                                                                                                                                                                                                                                                                                                            Query Match 0.37
Best Local Similarity 94.17
Matches 16; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      16; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Best Local Similarity
Matches 16; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Atopy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Query Match
                                                                                                                                                                                                                                                                                                                                     source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         DEFINITION
ACCESSION
VERSION
KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       RESULT 149
AX699215/C
                                                                                             DEFINITION
                                                                                                                                                                           ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              RESULT 150
BD009330
                                                  RESULT 148
                                                                                                                                                                                                                         AUTHORS
TITLE
JOURNAL
                                                                                                               ACCESSION
VERSION
                                                              AX029045
LOCUS
                                                                                                                                                                                                          REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               REFERENCE
                                                                                                                                         KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    KEYWORDS
                                                                                                                                                                                                                                                                                                                     FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    VERSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TITLE
                                                                                                                                                             SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ઠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ઠે
                                                                                                                                                              ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Ballabio, A. and Casari, G. Proteitary spastic paraplegia Protein associated to hereditary spastic paraplegia Patent: WO 995855-A 31 18-NOV-1999; FONDAZIONE TELETHON (IT); BALLABIO ANDREA (IT); CASARI GIORGIO (IT) LOCATION/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ;
0
                                                                                                                                                                                                                                                                                                     PAT 17-AUG-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                PAT 06-SEP-2000
                                                                                                                                                              Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Gaps
Locarnini, S.A., Bartholomeusz, A.I., Aye, T.T. and de Man, R.A. Viral variants and methods for detecting same Patent: US 6555311-A 6 29-APR-2003; Location/Qualifiers
                                                                                                                                                             ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          0.3%; Score 15.4; DB 1; Length 20; 94.1%; Pred. No. 98; ative 0; Mismatches 1; Indels
                                                                                                                              DB 1; Length 20;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       DB 1; Length 20;
                                                                                                                                                           1; Indels
                                                                                                                                                                                                                                                                                                     linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                linear
                                                                                                                                                                                                                                                                                                                                                                                                                         1 (bases 1 to 20)
Gatanaga, T. and Granger, G.A.
Tumor necrosis factor receptor releasing enzyme
Patent: US 6593456-A 98 15-JUL-2003;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1..20
/organism="synthetic construct"
/mol_type="unassigned DNA"
/db_xref="teaxon:32630"
/noTe="oligonucleotide"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         synthetic construct
synthetic construct
other sequences; artificial sequences.
                                                                                                                            0.3%; Score 15.4; D
94.1%; Pred. No. 98;
tive 0; Mismatches
                                                                                                                                                                                                                                                                                              Sequence 98 from patent US 6593456. AR359728
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      0.3%; Score 15.4; 1
94.1%; Pred. No. 98;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        20 bp
Sequence 31 from Patent W09958556.
AX010862.
AX010862.1 GI:9997573
                                                              1. 20
/organism="unknown"
/mol_type="genomic DNA"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      /mol_type="genomic DNA"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1. .20
/organism="unknown"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    4586 CCACACAGGGCTTCATC 4602
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1715 CATCCTGCCTACAGACC 1731
                                                                                                                                                                                        525 TTATATCCTAACCTTAC 541
                                                                                                                                                                                                          3 TTCTATCCTAACCTTAC 19
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      2 CCACAGAGGGCTTCATC 18
                                                                                                                         Query Match 0.39
Best Local Similarity 94.1;
Matches 16; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Query Match
Best Local Similarity 94.1<sup>s</sup>
Matches 16; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Query Match
Best Local Similarity 94.1.
Best Local 6; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                               Unclassified.
                                                                                                                                                                                                                                                                                                                                                                              Unknown.
                                                                                                                                                                                                                                                                                                                                                                                                  Unknown
                                                                                                                                                                                                                                                                                                              DEFINITION
ACCESSION
VERSION
                                                                 source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            source
                                                                                                                                                                                                                                                                    RESULT 146
AR359728
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             RESULT 147
AX010862
                                                                                                                                                                                                                                                                                                                                                                                                ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                            AUTHORS
TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ACCESSION
VERSION
KEYWORDS
SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      REFERENCE
AUTHORS
   AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            JOURNAL
                                JOURNAL
                                                                                                                                                                                                                                                                                                                                                               KEYWORDS
SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                              REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       JOURNAL
                                                 FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    PEATURES
                                                                                                                                                                                                                                                                                                   LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              LOCUS
                                                                                                                                                                                                                      유
                                                                                                                                                                                          ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ò
```

; 0

Gaps

ô

PAT 29-MAY-2003

linear

ö

Gaps

; 0

PAT 31-JAN-2002

linear

```
SOUNCE unidentified

ORGANISM unidentified

Unclassified.

Locarnini,S.A., Bartholomeusz.A.I., Aye,T.T. and Man,R.A.D.

AUTHORS Locarnini,S.A., Bartholomeusz.A.I., Aye,T.T. and Man,R.A.D.

AUTHORS Locarnini,S.A., Bartholomeusz.A.I., Aye,T.T. and Man,R.A.D.

JOURNAL Patent: JP 2001503277-A6 11-MAR-2001;

NORTH WESTERN HEALTH CARE NETWORK

COMMENT DP 13-MAR-2001

PP 14-MAR-2001

PP 15-AUG-1997 JP 1988521944

PR 06-NOV-1995 AU PO 3519

PR 16-NOV-1995 AU PO 3519

PR 16-NOV-1995 AU DO 3519

PR 17-CI2NT/01,CI2NT/00,CI2NIS/36,CI2NIS/54,CO7K14/02 CC

FH KRY

POURTY REAL

COCATION/01,CI2NIS/36,CI2NIS/54,CO7K14/02 CC

FH KRY

Location/Qualifiers

1. 20

/ Organism="unidentified"
/ AD_xref="taxon:32644"
/ AD_xref="taxon:32644"
/ AD_xref="taxon:32644"
/ Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
```

Search completed: August 18, 2005, 08:32:12 Job time : 10 secs

දු ද

COLOR WAR COLOR OF THE PARTY OF

ZmMAE PI3K PI3K PI3K PI3K		Human P13K regulat	P13K P13K P13K P13K	P13K P13K P13K	Human Pizk regulat Human Pizk regulat Human Pizk regulat Human Pizk regulat Himan Pizk regulat	P13K P13K P13K	P13K P13K P13K	Human P13K regulat Human P13K regulat Human P13K regulat	PI3K PI3K PI3K	P13K P13K	P13K P13K P13K	PI3K PI3K PI3K	PISK	Human Pilk regulat Human Pilk regulat Human Pilk regulat	PI3K PI3K PI3K	PI3K PI3K PI3K	PI3K PI3K PI3K	Human P13K regulat Human P13K regulat Human P13K regulat
0.4 20 1 AAF7646 0.4 20 1 ADH2667 0.4 20 1 ADH2670 0.4 20 1 ADH2673 0.4 20 1 ADH2673	0.4 20 1 ADH2 0.4 20 1 ADH2 0.4 20 1 ADH2 0.4 20 1 ADH2 0.4 20 1 ADH2	20 0.4 20 1 ADH26701 20 0.4 20 1 ADH26717 20 0.4 20 1 ADH26741 20 0.4 20 1 ADH26748 20 0.4 20 1 ADH2675 20 0.4 20 1 ADH2675	0.4 20 1 0.4 20 1 0.4 20 1 0.4 20 1	0.4 20 1 ADH2 0.4 20 1 ADH2 0.4 20 1 ADH2 0.4 20 1 ADH2 0.4 20 1 ADH2	0.4 20 1 ADHZ 0.4 20 1 ADHZ 0.4 20 1 ADHZ 0.4 20 1 ADHZ 0.4 20 1 ADHZ	0.44 20 11 10 10 10 10 10 10 10 10 10 10 10 10	0.4 20 1 ADH2 0.4 20 1 ADH2 0.4 20 1 ADH2 0.4 20 1 ADH2	0.4 20 1 ADH2 0.4 20 1 ADH2 0.4 20 1 ADH2	0.4 20 1 ADH2 0.4 20 1 ADH2 0.4 20 1 ADH2	0.4 20 1 ADH2674 0.4 20 1 ADH2676 0.4 20 1 ADH2670	2000	0.4	4.4.4.	4.4.4.	0.4 4 20 1	0.4 20 1	444.0	0 0 0 4 4 4.
0 0 0 0 4 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8	00 00	5085 644 644 6444 6444 6444 64444 64444 644	50 52 53 53 53		0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	υ	princed, c 66 c 67 c 68 c 68 c 68 c 68 c 68 c 68	ט ט	tran tium tium	טס ט	υ υ	000	υ (	υ υ			ch eer col	kill c 1 rime c 1 c 1 c 1 c 1 c 1 c 1 c 1 c 1 c 1 c
GenCore v (c) 1993 -	<pre>search, using sw model t 18, 2005, 08:36:54 ; Search time 32 Seconds (without alignments) 3.559 Million cell updates/sec</pre>	4 ctgcaggatcgagggggggcccggtacc	Gapext 0.5 197 residues	Batisfying chosen parameters: 1072 ::8 ::80	m Match 0% m Match 100% g first 542 summaries	results predicted by chance to hav	to the score of the result being of the total score distribution.  SUMMARIES	Length DB ID	1 ACN5485 Human s 1 ACN54858 Cotton 1 ACN52123 COtton	50 1 ADS74280 T50 element 50 1 ADS74279 A50 element 50 1 ADR18577 Oligonucleol		1 AAT93823 1 ADH26672 1 ADL34561	1 AAC90605 1 ADR51048 1 ADR8246	1 ADK48249 MICIO 1 AAT68809 Levan 1 ADH26671 Human 1 ADH2670	1 ADL34559 Human 1 ADL34559 Human 1 ADR44220 Caenon	1 AAV03154 PCR post post post post post post post post	1 ABA95961 Human mol	
Cop	OM nucleic - nucleic sea Run on: Àugust :	Title: US-10-667-022-Perfect score: 5085 Sequence: 1 ggatccccggg Scoring table: IDENTITY NUC	Gapop d: 536 a	Total number of hits sai Minimum DB seq length: ( Maximum DB seq length: (	Post-processing: Minimum Maximum Listing		score greater than or equal and is derived by analysis (	Result Query No. Score Match Lo	1 60 1. 2 44 0. 3 41.2 0.	4 40.6 0.8 6	33.2 0. 33.2 0. 10 27.6 0. 11 27 0.	12 27 0. 13 26 0. 14 26 0.	15 25.4 0.	2244	8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8	25 21 0. 26 21 0. 27 21 0.	28 21 0. 30 21 0.	20.2 20.2 20

Phosphoinositide-3 Phosphoinositide-3 Phosphoinositide-3 ISIS antisense oli ISIS antisense oli ISIS antisense oli Phosphoinositide-3 Phosphoinositide-3 Phosphoinositide-3 ISIS antisense oli	ISIS antisense oli ISIS antisense oli Phosphoinositide-3 Phosphoinositide-3 Phosphoinositide-3 ISIS antisense oli ISIS antisense oli ISIS antisense oli ISIS antisense oli ISIS antisense oli Phosphoinositide-3 Phosphoinositide-3 Phosphoinositide-3 Phosphoinositide-3 Phosphoinositide-3 Phosphoinositide-3 Phosphoinositide-3 Phosphoinositide-3 Phosphoinositide-3	ISIS antisense oli	Phosphoinositide-3 Phosphoinositide-3 Phosphoinositide-3 Phosphoinositide-3 Phosphoinositide-3 ISIS antisense oli	ISIS antisense oli ISIS antisense oli Phosphoinositide-3 Phosphoinositide-3 Phosphoinositide-3 Phosphoinositide-3 ISIS antisense oli ISIS antisense oli Phosphoinositide-3 Phosphoinositide-3 Phosphoinositide-3 Phosphoinositide-3 ISIS antisense oli ISIS antisense oli ISIS antisense oli
	аннаннаннанн	анананананана	20 1 ADI34666 20 1 ADI346675 20 1 ADI34681 20 1 ADI34681 20 1 ADI34586 20 1 ADI34586 20 1 ADI34586 20 1 ADI34639 20 1 ADI34591 20 1 ADI34591 20 1 ADI34594 20 1 ADI34594 20 1 ADI34594	
	00000000000000000000000000000000000000			· · · · · · · · · · · · · · · · · · ·
C C 1882 1882 1883 1885 C 1885 C 1885 C 1986 C 1991 C 1991 C 1993		0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
Human PI3K regulat	P13K P13K P13K P13K P13K P13K P13K P13K	Human P13K regulat	P13X P13X P13X P13X P13X P13X P13X P13X	Human P13K regulat ISIS antiense oli Phosphoinositide-3 Phosphoinositide-3
1 ADH26758 1 ADH26762 1 ADH26766 1 ADH26713 1 ADH26781 1 ADH26791 1 ADH26679 1 ADH26697 1 ADH26697 1 ADH26706 1 ADH26706 1 ADH26706 1 ADH26706 1 ADH26706	AD126788 1 AD126789 1 AD126789 1 AD1266802 1 AD1266801 1 AD126721 1 AD126736 1 AD126736 1 AD126770 1 AD126770 1 AD126770 1 AD126770 1 AD126778 1 AD126782 1 AD126782 1 AD126782 1 AD126782	1 ADH266803 1 ADH26680 1 ADH26680 1 ADH26690 1 ADH26700 1 ADH26701 1 ADH26703 1 ADH26703 1 ADH26703 1 ADH26703 1 ADH26703 1 ADH26810 1 ADH26810	ADM26054 1 ADM26714 1 ADM26714 1 ADM26718 1 ADM26702 1 ADM26777 1 ADM26777 1 ADM26777 1 ADM26719 1 ADM26725 1 ADM26725 1 ADM26740 1 ADM26740 1 ADM26755 1 ADM26755 1 ADM26755	1 ADH26680 1 ADH26685 1 ADH26698 1 ADH26738 1 ADH26738 1 ADH26787 1 ADH24585 1 ADH34585 1 ADH34603 1 ADH34603 1 ADH34610 1 ADH34637 1 ADH34637 1 ADH34634 1 ADH34634
00000000000000000000000000000000000000	* 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4	44444444444444	2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
~ m m C	120 122 123 124 125 126 127 128 133 133 133	135 136 136 139 140 141 142 144 144 147	0 0 149	2.05.28 2.05.2

מ
Ġ.
. rng
4.
Ċ
N
0
6
õ
1
-10-667-022
7
ė
Ã
Ω
gipps
O1

Hepatitis C virus Hepatitis C virus Hepatitis C virus Hepatitis C virus Hepatitis C virus	man .	. = '	Anodosporidium muc Murine alpha-L-idu	Human zinc finger Kringle protein 14	Нимал ргосеаве гед	Prion protein poly	Nucleotide #4 for	PCR primer used to	Tail primer #146 £	Driman FOX-1 Idvers	cdk-we-hu ribozyme	Cdk-we-hu ribozyme	2'-MOR gapmer anti	Antisense 2'-MOE g	Molecular beacon t	Acetylated aminopr	DOR primer synch	Human Vbeta gene r	4 synthesis-period	Hepatitis B virus	Hepatitis B virus	Primer SK-Zap for	PCR primer used to	T3 PCR primer for	Mche cloning prime Primer for DNA enc	Mammalian ced-3 ho	Hepatitis C virus	Primer for amplity Human telomeric re	p21 promoter, oliq	Human PI3K regulat	ISIS antibense oli	1,5-anhydroglucito	Negative control p	Human endothellal	Human ESM-1 antise	Human ESM-1 antise	Human ESM-1 antise	Matrix metalloprot	TCRB tubes A and B	Mouse VEGF reverse	PCK primer H used B thuringlensis C	B. thuringiensis c	PCR primer H used	B. thuringiensis c	PCK primer H used	Human ALMS1 PCR pr	Bovine GHR exon am	4 synthesis-period	Human PCK primer S	CR primer for	TNF	7
1 ADR82257 1 ADR82261 1 ADR82258 1 ADR82256		4 ~ 1	- <b>-</b>		-	Н.	4 ~	н	ч.	٠,	·	⊣.	٦,	٠,	-	٦,	٦,	٠.	-				ı –ı	н,	н -		н.	н,	٠,	Н.	н.		н	н,	4	н	⊶,	4 +-	-	٦,		4 ~	н	н,	н г	٠,	H	н.			, <del>, ,</del> ,	-
44444	# 4 4 4 0 C	233	7 7 7	4 4 4 4 4 4	4 24	44 24 A	18	4 22																																											3 20	
119900.000.000.000.0000.0000.0000	J 4. 4	. 4.	4.0	4.0	. 7.	. a		81	9.0	9.0		4.	4.4		.4	4.	4.4		.0	.2	200	. 0	7	7 0.			0			.0	e.		.8	æ. o		.8	8.		.8	.8	e. o		.8	.8	æ.		.8	.8	4. 4	. 4.	4.	4.
0 3226 0 3226 3228 3288 30	331		- <del>-</del>	-	-	339 1	c 341	342		٦.	346 1	п,	348 349	4 ~	-	352	٦,	355	-	-	358	300	361	362	363	365		C 367		-			-		377	-	379 1	180		Η,	-	1 -		ч.			392 1			4 ~		-
ISIS antisense oli ISIS antisense oli Phosphoinositide-3 Phosphoinositide-3	ISIS antibense our	sitic	Phosphoinositide-3 Phosphoinositide-3	ense	ISIS antisense oli	ISIS antisense oli	ISIS antiBense oli	ISIS antisense oli	ISIS antisense oli	TOTS antisense Oli	Phosphoinositide-3	Phosphoinositide-3	Fnosphoinosicide-3	ISIS antiBense oli	ISIS antisense oli	ISIS antisense oli	Phosphoinositide-3	Phosphoinositide-3	Phosphoinositide-3	Phosphoinositide-3	ISIS antisense oli	TSTS antisense oli	ISIS antisense oli	ISIS antisense oli	Phosphoinositide-3	Phosphoinosicide-3	Phosphoinositide-3	ISIS antisense oli	ISTS antigenee oli	ISIS antisense oli	Phosphoinositide-3	Phosphoinositide-3	Phosphoinositide-3	Phosphoinositide-3	ISTS antigense oli	Phosphoinositide-3	Phosphoinositide-3	Phosphoinositide-3	Micro-channel mole	r ug	Grand fir monoterp	7 10	int	INI U		Taminostimilatory		Non-Cpg DNA oligon		걸	Tobacco.plant PCR	iris c vir
20 1 ADL34628 20 1 ADL34635 20 1 ADL34650 20 1 ADL34667 20 1 ADL34667	44-			٠,			4	0	٦,	٦,		п 0			0	, 0	٠,		11	0		 			o 0		7 0	o 0	-				п 0		4 F		л 0	 		1		. 4	1 9	4	4 4	. 4	. 4	4	4 n	- H		
00000				00				0.							0	٠.		Ġ		°.	• •			0	<i>.</i>		ö			ö	٠.		0	<u>،</u>			٠.				<i>•</i> •		9.6	9.4	9.5	2.6	9.2	9.2	9.2	2.6	13	
0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	25.00		262 262	c 263								274		277			280	282	283		C 285				290	292		C 294			298	3 0 0	301		303		306	307	309	310		313	314	315	316	318	319	320	321			

AA284245-derived o AA465687-derived o AA909635-derived o Human glucocortico Human yBcGr-C antis Human VEGR-C targe Antisense DNA olig Antisense DNA olig	Human endothelial Human endothelial Chimeric phosphoro Chimeric phosphoro Human ESM-1 antise Human ESM-1 antise	Human ESM-1 antise Osmolyte-stabilise Farnesoid X recept Farnesoid X recept Endothelial differ KIAA1096 forward P CAPN3/DYSF PCR pri 5, PCR primer for Banana EFE gene fr Human biallelic ma Wound healing rela Mound healing rela	APLP2 polymorphism Endothelin convert Endothelin convert Mouse alpha 1-anti Pro-alpha1(III) ch Template (CTGA)5-A Porcine PULGS3 UP- Human NOGO Hammerh Human NOGO Inozyme Human NOGO Inozyme Murine oligonucleo Murine oligonucleo	Tumour suppression Tumour suppression Silkworm juvenile Procollagen I reve Human obestry-asso PCR primer used to Human apolipoprote Human apolipoprote Urease gene PCR pr Helicobacter UreB PI3K antisense inh Porward primer aa2 Human RECQLS inhib CLLDB exon 12 and Human TRCQLS inhib CLLDB exon 12 and Human RECQLS inhib CLLDB exon 12 and Human RECQLS inhib	Human endothelial Human endothelial Human endothelial Chimeric phosphoro Chimeric phosphoro Primer of the inve Farnesoid X recept Novel mutant prote Human PI3K regulat Human PI3K regulat SIS antisense oli Phosphoinositide-3
ABD30273  ABD25730  ABD26605  ADD664788  ADH64940  ADH54718  ADH54788  ADH54788  ADH54788	ADJ22653 ADJ22653 ADJ22653 ADJ22653 ADJ2970 ADJ29715 ADJ29601 ADJ29976	ADL59268 AD053504 AD053202 AD053202 AD053203 AD01338 AD014094 AAV37276 AAX7520 AAX74371 ABA81999	1 AAA0920 AA462183 1 ABK94358 1 ABK94357 1 ABK76147 1 ABK75638 1 ABK00063 1 ABK00963 1 ABK00963 1 ACC68083 1 ACC68083	1 ADB42787 1 ADB42787 1 ADB42797 1 AAR41074 1 ABX77709 1 AAR77556 1 AAR79520 1 AAA73146 1 AAA3146 1 AAA3146 1 AAA3146 1 AAA3146 1 AAA3146 1 AAA3146	1 ADH66955 1 ADH66955 1 ADC23055 1 ADC22915 1 ADK101043 1 ADK176762 1 ADK12104 1 ADC55680 1 ADC55680 1 ADC5680 1 ADC5680 1 ADC1052 1 ADL26724 1 ADL34613 1 ADL34613
				177 177 178 179 179 179 179 179 179 179 179 179 179	
					,
10.10.10.10.10.10.10.10.10		15.8 115.8 115.8 115.8 115.8	25.8 15.8 15.8 15.8 15.8 15.4 14.4 15.8 15.4 15.8	2001 2001 2001 2001 2001 2001 2001 2001	110 110 110 110 110 110 110 110
	4881 4883 4885 4885 4865 4866			0 513 0 514 114 0 516 518 519 0 522 0 523 0 525 0 525	0 529 0 231
Human stanniocalci Chimeric phosphoro Chimeric phosphoro Chimeric phosphoro Human CD90 reverse Proteasome 26S sub Human NOV4a PCR pr	IRN-alpha mC/23-73 Human polymorphic Primer for CTACK f Human CTACK compet rEST2 primer #2. Human Plt-1 DNA se Human Plt-1 DNA se	Tumour suppression Tumour suppression Analytical solid p 5'-phosphorylated Streptomyces hygro Human PLA2G1B gene PCR primer 8 to ge Human matrix metal Antisense oligo ta Primer for amplify Human gene single Adhalin gene single	Human biallelic ma HIV siNA oligonuci HIV siNA oligonuci Human HER2 (EGFR2) Human HER2 (EGFR2) Human apolipoprote Human apolipoprote Probe for CDK4 ge Human MTS1 exon2 P Human mItiple tum Nucleotide sequenc Seq IDH8 from USS7	Human MTS1 gene mu PCR priner for hum PCR priner for hum Human MTS related Human MTS related Human MTS sense Canine II-13 sense Oligonucleotide #8 Hco7 mice cDNA hea Priner #7. Homo s PCR primer #3 used Mice of genotype H Human multiple tum Human inflammatory Primer 42F for scr Crygs gene related Mammary gland bior	Human phosphorylas Mouse TNFK2 antise Heavy chain variab Humanized antibody Synthetic linker s Mouse urokinase pl Human MTS1 exon 2 Vitamin D nuclear Human CDK41 exon Human oligonucleot Human calmodulin 2
нананана				наннаннаннанна	20 1 ABK6889 20 1 ABC7488 20 1 ADC7488 20 1 ADC2459 20 1 ABX1334 20 1 ABX1334 20 1 ABZ2516 20 1 ADB9900 20 1 ADB9900 20 1 ADB9900 20 1 ADB9900 20 1 ABZ8451 20 1 ABZ8404 20 1 ABZ8404 20 1 ABZ8404 20 1 ABZ8404 20 1 ABZ8404 20 1 ABZ8404
				,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	
	2222222				11.55.88.88.88.88.88.88.89.89.89.89.89.89.89.
	407 408 409 411 411	4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4		# \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	000 0 0000 *44444444444444444 \$000000000000000

RESULT 2

## ALIGNMENTS

```
transcription units that populate a genome. The library comprises several oligonucleotides, each capable of hybridising selectively to a set of messenger RNAs transcribed from a given transcription unit of the genome, which encodes one or more messenger RNAs splice variants. The oligonucleotide libraries are useful for detecting mRNAs from a year oligonucleotide libraries are useful for detecting mRNAs from a coligonucleotide libraries are useful for detecting mRNAs from a coligonucleotide libraries are useful for detecting mRNAs from a coligonucleotide libraries may also be used as specialised mini libraries may also be used as specialised mini libraries to detect transcripts of a sub-transcriptome under a particular biological state, and so allowing the detection of tissue and pathology-specific genes such as those genes only expressed in specific tissue under a specific pathological condition; to detect to developmental specific genes; and to detect RNA transcripts and splice variants of a transcriptome of a patient suffering from a particular developmental specific genes; and to detect RNA transcripts and splice variants of a transcriptome of a patient suffering from a particular cates, manna and mice, which are used in the exemplification of the present invention. N.B. The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format catering from WIPO at ftp. wipo.int/pub/published_pct_sequences
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    New oligonucleotide libraries comprising oligonucleotides which selectively hybridize to mRNAs transcribed from a transcription unit of a genome, useful for detecting tissue-, pathology-, and developmental-
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            The present invention describes oligonucleotide libraries for detecting messenger RNAs that populate a (sub-)transcriptome, where the (sub-)transcriptome comprises messenger RNAs transcribed from multiple
                                                                                                                                                       Human spliced transcript detection oligonucleotide SEQ ID NO:10633.
                                                                                                                                                                                                     Human; mouse; rat; splice transcript; detection; RNA transcript;
splice variant; transcriptome; oligonucleotide library; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Faigler
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Sequence 60 BP; 14 A; 17 C; 12 G; 17 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Mintz L,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Example 1; SEQ ID NO 10633; 47pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Mintz E,
                       ABN37885 standard; DNA; 60 BP
                                                                                                                                                                                                                                                                                                                                                                                                         20-JUL-2001; 2001WO-IB001903.
                                                                                                                                                                                                                                                                                                                                                                                                                                                   28-JUL-2000; 2000US-0221607P.
02-MAY-2001; 2001US-0287724P.
                                                                                                             (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Shoshan A, Wasserman A,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    (COMP-) COMPUGEN INC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          WPI; 2002-257383/30.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          genome, useful
specific genes.
                                                                                                                                                                                                                                                                                                                 40200210449-A2.
                                                                                                                                                                                                                                                                         Ношо варіепв
                                                                                                             15-JUL-2002
                                                                                                                                                                                                                                                                                                                                                             07-FEB-2002
                                                                   ABN37885;
```

ö 4290 CGTCCATGGTATCTACTGTAGTCCTGCAGATGGAAATCCTATCCTACTAACAGCTGGCTC 4349 0; Gaps 1.2%; Score 60; DB 1; Length 60; 00.0%; Pred. No. 0.04; 0; Indels 100.0%; Prec. ... 60, Conservative Local Similarity Matches

Query Match

ઠે 용

CGTCCATGGTATCTACTGTAGTCCTGCAGATGGAATCCTATCCTATCTAACAGCTGGCTC

9

Cotton; plant; EST; expressed sequence tag; transgenic plant; androecium; variacy Nucotton13B; library LiBSSS; molecular tag; molecular marker; genetic mapping; molecular mapping; seed germination; plant growth; plant quality; plant yield; plant breeding; tissue printing; ss. Cotton androecium tissue EST Clone ID: LIB3828-025-Q6-K6-H9, SEQ:9639. Fincher KL, Ziegler TE; BP. 12-DEC-2001; 2001US-00021323. 14-DEC-2000; 2000US-0255619P. ACN54858 standard; cDNA; 54 (first entry) Deikman J, Feng PCC, DEIKMAN J. FENG P C C. FINCHER K.L. ZIEGLER T E. Gossypium hirsutum JS2004123340-A1 24-JUN-2004. 02-DEC-2004 ACN54858; (DEIK/) (FENG/) ZIEG/) ACN54858 

New isolated nucleic acid molecule that encodes a plant protein or its fragment, useful for isolating a variety of agronomically significant genes associated with plant growth, quality or yield, and as molecular WPI; 2004-479808/45. tags to map genes.

Claim 1; SEQ ID NO 9639; 34pp; English.

The invention relates to 17880 cotton expressed sequence tags (ESTB;
ACM45220-ACN63099). The ESTB were isolated from cDNA libraries generated
from primed or non-primed seeds from variety DPSDB, mature seeds from
variety Coker 312 Boswell 96 Field, and androecium tissue,
genes, developing fibres, carpel walls and septa from variety
tissue, developing fibres, carpel walls and septa from variety
Nucctorn33B. The invention also relates to substantially purified
proteins or their fragments encoded by nucleic acid molecules of the
invention, and to transformed plants having a nucleic acid construct
comprising a nucleic acid of the invention. The cotton ESTB are useful a
molecular tags to isolate genetic regions, to isolate genes are
members of a particular gene family. The nucleic acid molecules may be
used for isolating a variety of agronomically significant genes
associated with plant growth, quality, yield, and could also serve as
links in metabolic and catabolic pathways. The nucleic acid molecules are
also useful for identifying genes important in intitating and maintaining
seed germination or that may be used to mitigate stresses encountered
course and cis-regulatory elements which will be useful to express
also useful significant genes in these tissues and/or other tissues,
conductors and cis-regulatory elements which will be useful for
and also permits the acquisition of molecular markers useful in breeding
and also permits the acquisition of molecules are further useful for
detecting the expression level or pattern of a protein or maker
cotton variety Nuccton318 androecular issue parinting. The
present sequence represents a specifically claimed EST isolated from a
cotton variety Nuccton318 androecular issue parinting. The
sequence data for this patent did not form part of the printed
sequence data for this patent did not form part of the printed
sequence the sequence represents a sequince. The parent of the printed
sequence data for this patent did not form part of the printed
sequence data to sequence in th

X S

a

ઠે

```
Matches
                                                                                                                                                                                                                                                                                                                                                                         88888888888888
                                                                                                                                                                                                                                                                                 a
                                                                                                                                                                                                                                                      ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        The invention relates to 17880 cotton expressed sequence tags (ESTS;

C ACM45220-ACN63099). The ESTS were isolated from CDNA libraries generated
from primed or non-primed seeds from variety DBF50B, mature seeds from

CC variety Coker 312 Boswell 96 Field, and androecium tissue, gynoecium

CC tissue, developing fibres, carpel walls and septa from variety

CC broction33B. The invention also relates to substantially purified

CC proteins or their fragments encoded by nucleic acid molecules of the

CC proteins or their fragments encoded by nucleic acid construct

C invention, and to transformed plants having a nucleic acid construct

C comprising a nucleic acid of the invention. The cotton ESTS are useful

CC comprising a nucleic acid from invention in the cotton ESTS are useful

CC molecular tags to isolate genetic regions, to isolate genes, to map

CC members of a particular gene family. The nucleic acid molecules may be

CC used for isolating a variety of agronomically significant genes

CC used for isolating a variety of agronomically significant genes

CC links in metabolic and catabolic pathways. The nucleic acid molecules are

CL inks in metabolic and catabolic pathways. The nucleic acid molecules

CC links in metabolic and catabolic pathways. The nucleic acid molecules

CC seed germination or that may be used to mitigate stresses encountered

CC during seed germination. The ESTs additionally enable the acquisition of

CC promocras and cis-regulatory elements which will be useful to express

CC promocras and cis-regulatory elements which will be useful to express

CC promocras and cis-regulatory elements which will be useful to express
                                                                           ö
                                                                                                                                                                                                                                                                                                                             Cotton; plant; EST; expressed sequence tag; transgenic plant; androecium; variety Nucotton33B; library LIB382B; molecular tag; molecular marker; genetic mapping; molecular mapping; seed germination; plant growth; plant quality; plant yield; plant breeding; tissue printing; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        New isolated nucleic acid molecule that encodes a plant protein or its fragment, useful for isolating a variety of agronomically significant genes associated with plant growth, quality or yield, and as molecular
                                                                                                                                                                                                                                                                                                  Cotton androecium tissue EST Clone ID: LIB3828-012-Q1-K6-A4, SEQ:6904.
                                                                                                         54
                                                                             ..
0
                                                                                                                                Score 44; DB 1; Length 54;
Pred. No. 1.2;
                                                                             Indels
                  Sequence 54 BP; 46 A; 1 C; 7 G; 0 T; 0 U; 0 Other;
                                                                             2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Ziegler TE;
                                                                           0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Claim 1; SEQ ID NO 6904; 34pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Fincher KL,
                                                                                                                                                                                                               BP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              14-DEC-2000; 2000US-0255619P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  12-DEC-2001; 2001US-00021323
                                                0.9%;
                                                                                                                                                                                                               ACN52123 standard; cDNA; 51
                                                                                                                                                                                                                                                                           (first entry)
                                                                1 Similarity 90.4 47; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Deikman J, Feng PCC,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           (DEIK/) DEIKMAN J.
(FENG/) FENG P C C.
(FINC/) FINCHER K L.
(ZIEG/) ZIEGLER T E.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 WPI; 2004-479808/45.
                                                                                                                                                                                                                                                                                                                                                                                                            Gossypium hirsutum.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              tags to map genes.
                                                                                                                                                                                                                                                                                                                                                                                                                                           US2004123340-A1.
                                                                                                                                                                                                                                                                           02-DEC-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      24-JUN-2004
                                                                                                                                                                                                                                              ACN52123;
                                                  Query Match
                                                                  Local
                                                                                Matches
                                                                                                                                                                                      RESULT 3
                                                                                                                                                                                                      ACN52123
```

```
The invention relates to 17880 cotton expressed sequence tags (ESTs, ACN45220-ACN63099). The ESTs were isolated from cDNA libraries generated from primed or non-primed seeds from variety DPSOB, mature seeds from variety Coker 312 Boswell 96 Field, and androecium tissue, gynoecium tissue, developing fibres, carpel walls and septa from variety Nucotton33B. The invention also relates to substantially purified proteins or their fragments encoded by nucleic acid molecules of the invention, and to transformed plants having a nucleic acid construct comprising a nucleic acid of the invention. The cotton ESTs are useful as molecular tags to isolate genetic regions, to isolate genes, to map
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Cotton; plant; EST; expressed sequence tag; transgenic plant; androecium; variety Nucotton33B; library LIB382B; molecular tag; molecular marker; genetic mapping; molecular mapping; seed germination; plant growth; plant quality; plant yield; plant breeding; tissue printing; ss.
                                                                                                                                                                                                                                                                         from the US
and also permits the acquisition of molecular markers useful in breeding schemes, genetic and molecular mapping, and in cloning of agronomically significant genes. The nucleic acid molecules are further useful for detecting the sypression level or pattern of a protein or mRNA and for detecting the presence or quantity of a protein by tissue printing. The present sequence represents a specifically claimed EST isolated from a cotton variety Nucotton33B androscium tissue cDNA library (LIB3828). The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format directly from the US patent office at seqdata.uspto.gov/sequence.html?DocID=US20040123340
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             New isolated nucleic acid molecule that encodes a plant protein or its fragment, useful for isolating a variety of agronomically significant genes associated with plant growth, quality or yield, and as molecular
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Cotton androecium tissue EST Clone ID: LIB3828-012-Q1-N6-A4, SEQ:6000.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               DB 1; Length 51;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Sequence 51 BP; 49 A; 1 C; 0 G; 0 T; 0 U; 1 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Fincher KL, Ziegler TE;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       2.2;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                     Score 41.2;
Pred. No. 2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Claim 1; SEQ ID NO 6000; 34pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      12-DEC-2001; 2001US-00021323.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                14-DEC-2000; 2000US-0255619P.
                                                                                                                                                                                                                                                                                                                                                                                                                                            0.8%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ACN51219 standard; cDNA; 51
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            43; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Feng PCC,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        FINCHER K L. ZIEGLER T E.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          WPI; 2004-479808/45.
                                                                                                                                                                                                                                                                                                                                                                                                                                               Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Gossypium hirsutum.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       (DEIK/) DEIKMAN J.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                tags to map genes.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               US2004123340-A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    02-DEC-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            24-JUN-2004.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Deikman J,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ACN51219;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    (FINC/)
(ZIEG/)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         (FENG/)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      RESULT 4
ACN51219/c
```

genes, to determine gene function and to determining whether genes are members of a particular gene family. The nucleic acid molecules may be used for isolating a variety of agronomically aignificant genes associated with plant growth, quality, yield, and could also serve as links in metabolic and catabolic pathways. The nucleic acid molecules are also useful for identifying genes important in initiating and maintaining seed germination or that may be used to mitigate stresses encountered during seed germination. The ESTs additionally enable the acquisition of promoters and cis-regulatory elements which will be useful to express as agronomically significant genes in these tissues and/or other tissues, and also permits the acquisition of molecular markers useful in breeding schemes, genetic and molecular mapping, and in cloning of agronomically significant genes. The nucleic acid molecules are further useful for detecting the expression level or pattern of a protein or mRNA and for detecting the presence or quantity of a protein by tissue printing. The presence are sequence represents a specifically claimed EST isolated from a sequence data for this patent did not form part of the printed from a sequence data for this patent did not form part of the printed from the specification, but was obtained in alectronic format directly from the US patent office at sequence.html?DocID=US20040123340 \$

Sequence 51 BP; 0 A; 0 C; 1 G; 50 T; 0 U; 0 Other;

Gaps ö 0.8%; Score 41.2; DB 1; Length 51; 33.5%; Pred. No. 2.2; ve 0; Mismatches 3; Indels Local Similarity 93.5%; 43; Conservative Query Match Matches ઠ 음

ö

ADS74280 standard; DNA; 50 BP (first entry) 16-DEC-2004 ADS74280; ADS74280/ 

T50 element used in RNA probe

AU-rich element; ARE; antiinflammatory; antiarthritic; antirheumatic; RNA stability; immunostimulant; ss.

Synthetic.

WO2004081179-A2

23-SEP-2004.

05-MAR-2004; 2004WO-US006703

06-MAR-2003; 2003US-0451976P.

(USSH ) US DEPT HEALTH & HUMAN SERVICES

Blackshear PJ; Lai WS,

WPI; 2004-668946/65.

The present sequence is that of an T50 element found in RNA probes used in examples from the invention. The invention provides a method for screening an agent for its ability to modulate RNA processing. The method comprises (a) contacting the agent with a sample comprising (i) tristetraproline (TIP), TTP-related polypeptide, fragment or variant, (ii) a polyA-preferring 3'-5'-ribo-exonuclease (PARN) polypeptide or its Screening an agent for its ability to modulate RNA processing comprises contacting the agent with a sample comprising tristetraprolin (TTP), a poly(A)-preferring, 3'-5' ribo-exonuclease (PARN) polypeptide and an RNA. Example; SEQ ID NO 35; 94pp; English

active fragment or variant (if the PARN is in a cell, the cell comprises exogenous PARN) and (iii) an RNA which comprises an ARE downstream of a reporter sequence and a 3 polyA tail, where processing of the RNA can be detected, under conditions effective for processing and, optionally, cranslation of the RNA, and (b) detecting processing of the RNA, e.g. by measuring the amount and/or structure of the RNA, deadenylation of the RNA, or binding of the TTP to the ARE. The method can be used to screen for an agent able to inhibit RNA processing for the treatment of a condition mediated by insufficient granulocyte-macrophage colony cimulating factor or for treating frannlocytepenia. It may also be used to screen for an agent able to stimulate RNA processing for treatment of a condition mediated by excess tumour necrosis factor-alpha, an architis (all claimed). The method can be conducted in vitro or in a arthritis (all claimed). The method can be conducted in vitro or in a arthritis (all claimed). The method can be conducted in vitro or in a cell-based format. A high-throughput screening method may be used.

Sequence 50 BP; 0 A; 0 C; 0 G; 50 T; 0 U; 0 Other;

Gaps ö 0.8%; Score 40.6; DB 1; Length 50; 91.5%; Pred. No. 2.5; ive 0; Mismatches 4; Indels Query Match
Beet Local Similarity 91.50,
Beet Local 43; Conservative

ö

8 셤

A50 element used in RNA probe. ADS74279 standard; RNA; 50 BP 16-DEC-2004 (first entry) ADS74279; RESULT 6 ADS74279 

AU-rich element; ARE; antiinflammatory; antiarthritic; antirheumatic; RNA stability; immunostimulant; ss. Synthetic.

WO2004081179-A2.

23-SEP-2004.

05-MAR-2004; 2004WO-US006703.

06-MAR-2003; 2003US-0451976P

(USSH ) US DEPT HEALTH & HUMAN SERVICES

Lai WS, Blackshear PJ;

WPI; 2004-668946/65.

Screening an agent for its ability to modulate RNA processing comprises contacting the agent with a sample comprising tristetraprolin (TTP), a poly(A)-preferring, 3'-5' ribo-exonuclease (PARN) polypeptide and an RNA.

Example; SEQ ID NO 35; 94pp; English.

The present sequence is that of an A50 element found in RNA probes used in examples from the invention. The invention provides a method for screening an agent for its ability to modulate RNA processing. The method comprises: (a) contacting the agent with a sample comprising (i) tristetraproline (TTP), TTP-related polypeptide, fragment or variant, (ii) a polyA-preferring 3.5-ribo-exonuclease (PARN) polypeptide or its active fragment or variant (if the PARN is in a cell, the cell comprises exogenous PARN) and (iii) an RNA which comprises an ARE downstream of a reporter sequence and a 3 polyA tall, where processing of the RNA can be detected, under conditions effective for processing and, optionally, translation of the RNA, and (b) detecting processing of the RNA, e.g. by

```
ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                The invention relates to an isolated cardiac hypertrophy factor (GHF), excluding rat CHF. The cardiac hypertrophy factor (also known as cardiotrophin or cardiotrophin-1) is useful for treating cardiac hypertrophy, heart failure, arrhythmic or inotrophi disorder, congestive heart failure and neurodegenerative diseases such as peripheral neuropathies, Alzheimer's disease, stroke, or Parkinson's disease. The nucleic acid and antibody are useful as diagnostic reagents. The present sequence represents oligonucleotide ocdl.1.3 used in construction of a
measuring the amount and/or structure of the RNA, deadenylation of the RNA, or binding of the TTP to the ARE. The method can be used to screen for an agent able to inhibit RNA processing for the treatment of a condition mediated by insufficient granulocyte-macrophage colony stimulating factor or for treating granulocytopenia. It may also be used to screen for an agent able to stimulate RNA processing for treatment of a condition mediated by excess tumour necrosis factor-alpha, an inflammatory condition, rheumatoid arthritis, Crohn's disease or arthritis (all claimed). The method can be conducted in vitro or in a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             88; cardiac hypertrophy factor; CHF; cardiotrophin; cardiotrophin-1; cardiac hypertrophy; heart failure; arrhythmic; inotropic disorder; congestive heart failure; neurodegenerative disease; peripheral neuropathy; Alzhelmer's disease; stroke; Parkinson's disease.
                                                                                                                                                                                                                                                              Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      New isolated cardiac hypertrophy factor (cardiotrophin), useful for treating heart failure, arrhythmic disorders and neurodegenerative
                                                                                                                                                        cell-based format. A high-throughput screening method may be used.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Oligonucleotide ocdl.1.3 used in construction of a cDNA library.
                                                                                                                                                                                                                                                            0
                                                                                                                                                                                                                                                                                            0.8%; Score 40.6; DB 1; Length 50; 91.5%; Pred. No. 2.5; ve 0; Mismatches 4; Indels
                                                                                                                                                                                                                                                                                                                            47
                                                                                                                                                                                          Sequence 50 BP; 50 A; 0 C; 0 G; 0 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Wood
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Pennica D,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Example 1; SEQ ID NO 5; 52pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        94US-00286304.
95US-00443129.
96US-00733850.
                                                                                                                                                                                                                                                                                                                                                                                                                     BP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        29-JUN-2001; 2001US-00896856
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        24-NOV-2003; 2003US-00722095
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          94US-00233609
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           98US-00033114
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Chien K, King K,
                                                                                                                                                                                                                                              1 Similarity 91.5%;
43; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                   ADR18577 standard; DNA; 50
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               (REGC ) UNIV CALIFORNIA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             (GETH ) GENENTECH INC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             WPI; 2004-560446/54.
                                                                                                                                                                                                                                                   Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           US2004116678-A1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             05-AUG-1994;
17-MAY-1995;
18-OCT-1996;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             25-APR-1994;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               02-MAR-1998;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      07-OCT-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          17-JUN-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Synthetic.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Baker J,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  diseases
                                                                                                                                                                                                                                                                                                                                                                                                                                                        ADR18577;
                                                                                                                                                                                                                                   Query Match
                                                                                                                                                                                                                                                                                                                                                                                                      ADR18577/c
                                                                                                                                                                                                                                                                     Matches
                                                                                                                                                                                                                                                                                                                                                                                                                        ઠે
                                                                                                                                                                                                                                                                                                                                      g
```

```
The invention relates to a novel composition comprising a substance that CC modulates the status of 238PLB2, or a molecule that is modulated by modulates the status of 238PLB2, or a mon-human transgenic animal to that produces an antibody; a hybridoma that produces an antibody; a polymucleotide that encodes a peptide; a cytocoxic agent or a cell that expresses 238PLB2; a polymucleotide that encodes a peptide; a cytocoxic agent composition cited above, in the substance composition cited above, in the content of a human unit dosage form, where the substance composition cited above, in coleaves a polymucleotide having 238PLB2 coding sequence or a mucleic acid cleaves a polymucleotide having 238PLB2 coding sequence or a mucleic acid cleaves a polymucleotide having 238PLB2 coding sequence or a mucleic acid specifically recognise a 238PLB2 peptide sequence in the context of a pericular HLA molecule; inhibiting growth of cancer cells that express content of a pericular HLA molecule; inhibiting growth of cancer cells that express concert in an individual. The novel composition has cytostatic activity. The 238PLB2 polymucleotide can be used in gene therapy to treat concert in an individual. The novel composition has cytostatic activity. The 238PLB2 polymucleotide can be used in detecting, preventing, cyaccine. The composition and methods are useful in detecting, preventing, prognosing or treating cancer (e.g. prostate cancer). The genes, proteins or antenpode and produce or a primer, or in changenes. The polymucleotide may be used as a probe or a primer, or in changement mapping. This polymucleotide represents a primer used in the exemplification of the invention.
                                                                                                       ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                 238P1B2; transgenic animal; cytotoxic; cancer; cytostatic; gene therapy; vaccine; prostate cancer; humoral; cellular immune response; primer; BS.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              A composition useful for detecting, preventing or treating cancer (e.g. prostate cancer) comprises a substance that modulates the status of 238P1B2, or a molecule that is modulated by 238P1B2.
                                                                                                           Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Challita-Eid PM, Faris M, Hubert RS, Morrison RK;
                                                                                                                                                   5080
                                                                                                           .
0
                                                                                                                                                                      DB 1; Length 50;
                                                                                                         7; Indels
                                                                                                                                                                                                                                                                                                                                                                                                             238P1B2 gene related DPNCDN cDNA synthesis primer.
                             Sequence 50 BP; 3 A; 7 C; 7 G; 33 T; 0 U; 0 Other;
                                                                   0.7%; Score 37.8; DI
85.7%; Pred. No. 4.6;
tive 0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Example 1; Page 68; 315pp; English.
                                                                                                                                                                                                                                                                                              BP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      01-APR-2002; 2002WO-US010132
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            01-APR-2002; 2002WO-US010132
                                                                                                                                                                                                                                                                                                ADI97735 standard; DNA; 43
                                                                                                                                                                                                                                                                                                                                                                              (first entry)
                                                                           Query Match
Best Local Similarity 85.7
Matches 42; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Jakobovits A;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    (AGEN-) AGENSYS INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     WPI; 2003-812724/76.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             WO2003085081-A2.
CDNA library.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Unidentified.
                                                                                                                                                                                                                                                                                                                                                                                04-NOV-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Raitano AB,
                                                                                                                                                                                                                                                                                                                                          ADI97735;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Ge ₩,
                                                                                                                                                                                                                                                          RESULT 8
ADI97735/
                                                                                                                                                                                                                                                                                                      ខ្ពង់ខ្ល
                                                                                                                                                                                               셤
```

Q

RESULT 9

ò g

```
generic formula, in the 3.5° or 5°.3° direction: (GaTa') a. (GbTb')b'. (GaTa') a'. (GbTb')b'. different from each other; a', b', c', d', e', f', and g' = 0.10, equal or different from each other; a', b', c', d', e', f', and g' = 0.30, equal or different from each other; a', b', c', d', e', f', and g' = 10.6° equal or different from each other; The oligonucleotides are believed to selectively bind and sequenter some proteins which are essential to the viability and growth of tumoural cell line. They have specific and selective cytotoxic activity against tumour cells, and can be used for treating tumours of the liquid type, in particular of lymphoblastic origin, and of solid type, in particular lymphomas. The present phosphodiseter oligonucleotide, at a concentration of 15 micromolar, reduced growth of CRR-CEM tumoural cells and sectable 48
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    nours after administration. (Updated on 25-MAR-2003 to correct PR field.)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        New phospho:di:esteric oligo:nucleotide(s) - which exert a specific and selective cytotoxic effect on tumour cells, for treating both solid and
                 Antitumoural phosphodiester oligonucleotide 6 with cytotoxic activity.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Antitumoural phosphodiester oligonucleotide 5 with cytotoxic activity.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      phosphodiesteric oligonucleotides AAT93811-27 are based on the
                                              Phosphodiester; selective binding; cell viability; growth; tumoural cell line; cytotoxic activity; tumour cell; lymphoma; lymphoblastic tumour; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              DB 1; Length 35;
                                                                                                                                                               Location/Qualifiers
1. .35
/*tag= a
/note= "phosphodiester oligonucleotide"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Sequence 35 BP; 0 A; 0 C; 5 G; 30 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  4;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       5032 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAC 5065
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Score 27.6; DE Pred. No. 36; 0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            35 ACAAAAAACAAAAAAAAAAAAAAAAAAAAAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Claim 10; Page 5; 38pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          0.5%;
                                                                                                                                                                                                                                                                                                                                                                    95IT-MI002539
                                                                                                                                                                                                                                                                                                                                 96WO-EP005388
                                                                                                                                                                                                                                                                                                                                                                                                                                                Quadrifoglio
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AAT93815 standard; DNA; 35
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           (revised)
(first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Query Match 0.5
Best Local Similarity 88.2
Matches 30, Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   WPI; 1997-319771/29
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               selective cytot
liquid tumours.
                                                                                                                                                                                                                                                                                                                                                                                                             (SAIC-) SAICOM
                                                                                                                                                                                                                                                                                                                                                                                                                                                Scaggiante B,
                                                                                                                                                                Key
modified_base
                                                                                                                                                                                                                                                            WO9720924-A1
                                                                                                                                                                                                                                                                                                                                 04-DEC-1996;
                                                                                                                                                                                                                                                                                                                                                                      04-DEC-1995;
                                                                                                                                                                                                                                                                                               12-JUN-1997.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             25-MAR-2003
24-FEB-1998
                                                                                                                              Synthetic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AAT93815;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                RESULT 11
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AAT93815/
SEX BE BE SEX BE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        g
                                                                                         ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Sequencing p812 revealed that the cDNA insert was within the EcoRI and XhoI sites of that plasmid and was directionally correct by out of frame with respect to the beta-galactosidase sequences. To improve the production of galactinol synthase, p821 was modified to place the galactinol synthase sequences in-frame with those of beta-galactosidase. (Updated on 25-MAR-2003 to correct PN field.)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Nucleotide sequence of galactinol synthase from zucchini and soybean - used to produce plants having altered levels of raffinose saccharide(s)
                                                                                           Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Gaps
                                                                                                                                                                                                                                                                                                                                                                                        Sequence of the 5' junction between the vector and insert of p812.
                                                                                         ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ö
                                                                                                                                                                                                                                                                                                                                                                                                                             Galactinol synthase; enzyme; raffinose saccharide; sucrose; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Local Similarity 92.1%; Score 33.2; DB 1; Length 40; es 35; Conservative 0: Micmart.
                                                      DB 1; Length 43;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Becker-Manley MF,
                                                                                       2; Indels
                                                                                                                            Sequence 40 BP; 6 A; 10 C; 15 G; 9 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1 GGATCCCCCGGGCTGCAGGAATTCGGCACGAGGGGAGT 38
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                edarcececesecriscassaarresecaesasererrer 40
                 Sequence 43 BP; 3 A; 2 C; 2 G; 36 T; 0 U; 0 Other;
                                                                                                                                                                ; Score 33.8; DE; Pred. No. 10; 0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Schweiger BJ,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        (DUPO ) DU PONT DE NEMOURS & CO E I.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Example; Page 66; 80pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  92WO-US006057
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   91US-00735066
                                                                     Best Local Similarity 94.6%;
Matches 35; Conservative
                                                                                                                                                                                                                                                          AAQ36506 standard; DNA; 40
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AAT93816 standard; DNA; 35
                                                                                                                                                                                                                                                                                                                                                   (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       (revised)
(first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Kerr PS, Pearlstein RW,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               WPI; 1993-058793/07
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         and/or sucrose.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      WO9302196-A1
                                                                                                                                                                                                                                                                                                                               25-MAR-2003
06-JUN-1993
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                24-JUL-1992;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   25-MAR-2003
24-FEB-1998
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Synthetic.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Query Match
Best Local Si
Matches 35
                                                                                                                                                                                                                                                                                             AAQ36506;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AAT93816;
                                                                                                                                                             43
                                                    Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       RESULT 10
AAT93816/c
ID AAT93
XX
AC AAT93
XX
DT 25-MA
DT 25-MA
```

ö

Gape

ö

Indels

셤

ઠ

```
04-DEC-1996;
                                                                                                                                                                  04-DEC-1995;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  30;
                                                                                             WO9720924-A1
                                                                                                                    12-JUN-1997.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ADH26672;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  35
          Synthetic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Best Loca
Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        RESULT 13
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ADH26672
ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  셤
                                                                                                                                                                                                                                                                                                                                                                           Novel phosphodiesteric oligonucleotides AAT93811-27 are based on the cgeneric formula, in the 3'-5' or 5'-3' direction: (GaTa')a'.-(GbTb')b'.-
Cg generic formula in the 3'-5' or 5'-3' direction: (GaTa')a'.-(GbTb')b'.-
CG (GCTc')c''-(GdTd')d''-(GeTe')e''-(GfTf')f''-(GTGT')g''-N', where: N and CG (GCTc')c''-(GdTd')d''-(GTGT')g''-N', where: N and Gifferent from each other; a', b', c', d', e', f', and g' = 0-10, equal or calfferent from each other; a', b', c', d', e', f', and g' = 1-30, equal or different from each other; The oligonucleotides are believed of company and growth of the special swhich are essential to the viability and growth of tumoural cell line. They have specific and selective cytocoxic activity against tumour cells, and can be used for treating tumours of the liquid type, in particular of lymphoblastic corigin, and of solid type in particular lymphomas. The present phosphodiester oligonucleotide, at a concentration of 15 micromolar, phosphodiester oligonucleotide, at a concentration of 15 micromolar, cells concentration of 15 micromolar, concentration of 15 micromolar.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         phosphodiester oligonuclectide, at a concentration of 15 micromolar, reduced growth of CCRF-CEM tumoural cells by 87%, which is detectable 48 hours after administration. (Updated on 25-MAR-2003 to correct PR field.)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Antitumoural phosphodiester oligonucleotide 13 with cytotoxic activity.
                                                                                                                                                                                                                                                                                                         New phospho:di:esteric oligo:nucleotide(s) - which exert a specific and selective cytotoxic effect on tumour cells, for treating both solid and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           .;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Phosphodiester; selective binding; cell viability; growth; tumoural cell line; cytotoxic activity; tumour cell; lymphoma; lymphoblastic tumour; 88.
Phosphodiester; selective binding; cell viability; growth; tumoural cell line; cytotoxic activity; tumour cell; lymphoma; lymphoblastic tumour; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    DB 1; Length 35;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Indels

    .35
    /*tag= a
    /note= "phosphodiester oligonucleotide"

                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Sequence 35 BP; 0 A; 0 C; 5 G; 30 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ις
••
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    5025 ААААААААААААААААААААААААААААААААА 5059
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       41;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     .0.5%; Score 27;
85.7%; Pred. No. 4
                                                                            cocation/Qualifiers
                                                                                                                                                                                                                                                                                                                                                              Claim 10; Page 5; 38pp; English.
                                                                                                                                                                                                                                                              Quadrifoglio F;
                                                                                                                                                                                      96WO-EP005388.
                                                                                                                                                                                                              95IT-MI002539.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AAT93823 standard; DNA; 35
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Query Match
Best Local Similarity 85.79
Marches 30, Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          (revised)
                                                                                                                                                                                                                                                                                       WPI; 1997-319771/29.
                                                                                                                                                                                                                                        SAIC-) SAICOM SRL
                                                                                                                                                                                                                                                                                                                                         liquid tumours.
                                                                                                                                                                                                                                                                 Scaggiante B,
                                                                                Key
modified base
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          25-MAR-2003
24-FEB-1998
                                                                                                                                                                                          04-DEC-1996;
                                                                                                                                                                                                                04-DEC-1995;
                                                                                                                                          W09720924-A1
                                                                                                                                                                 12-JUN-1997
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AAT93823;
                                                        Synthetic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      RESULT 12
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           δ
```

```
New phospho:di:esteric oligo:nucleotide(s) - which exert a specific and selective cytotoxic effect on tumour cells, for treating both solid and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Human; phosphoinositide-3-kinase regulatory subunit 4; p150; P13K; P13 kinase; ss; antisense oligonucleotide; phosphorothioate linkage; 2'-0-methoxyethyl sugar moiety; 5-methyloytosine; hyperproliferative disorder; cancer; Chediak-Higashi syndrome; neurodegenerative disorder; metabolic disorders; inflammation; cytostatic; immunomodulator; neurodegenerative; antimicrobial; antiinflammatoxy; probe.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ..
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            0.5%; Score 27; DB 1; Length 35; Conservative 0; Minarty
                                    /*tag= a
/note= "phosphodiester oligonucleotide"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Sequence 35 BP; 0 A; 0 C; 5 G; 30 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 5025 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 5059
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Human PI3K regulatory subunit 4, p150 DNA probe.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  aaaaacaaaacaaaacaaaaacaaaaa 1
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                  Claim 10; Page 6; 38pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ADH26672 standard; DNA; 26 BP
                                                                                                                                                                                                                                                            Quadrifoglio F;
                                                                                                                                                       96WO-EP005388.
                                                                                                                                                                                        95IT-MI002539
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             11-MAR-2004 (first entry)
                  1. .35
/*tag=
                                                                                                                                                                                                                                                                                             WPI; 1997-319771/29
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Local Similarity
                                                                                                                                                                                                                           (SAIC-) SAICOM SRL.
                                                                                                                                                                                                                                                                                                                                                                 liquid tumours.
                                                                                                                                                                                                                                                              Scaggiante B,
     Key
modified_base
```

/\*tag= b /mod\_base= OTHER /note= "TAMRA labelled"

/mod\_base= OTHER /note= "FAM labelled"

base= OTHER

/\*tag= a

```
US2004063657-A1
                                       modified_base
                                                                                                                                     01-APR-2004
ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           셤
                                                                                                                                                                                                                                                                                                                        The invention relates to a compound targeted to a nucleic acid molecule encoding human phosphoinositide-3-kinase (PI3K) regulatory subunit 4, p150. The compound is an antisense oligonucleotide that specifically hybridises with a nucleic acid molecule encoding PI3K regulatory subunit 4, p150 and inhibits expression of the polypeptide. The antisense oligonucleotide comprises at least one modified internucleoside linkage i.e. a phosphorothioate linkage, at least one modified sugar molety, preferably a 2'-O-methoxyethyl sugar molety, or at least one modified nucleobase comprising a 5-methylcytosine. The antisense compounds are useful for modulating the expression of F13K regulatory subunit 4, p150 and for preventing or treating hyperproliferative disorders and metabolic disorders. These may also be used in research and diagnostics metabolic disorders. These may also be used in research and diagnostics and in preventing or delaying infection or inflammation. This sequence represents a probe which hybridises to DNA encoding the human F13K regulatory subunit 4, p150 polypeptide of the invention.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  antisense; inhibitor; hybridisation; human; phosphoinositide-3-kinase; regulatory subunit 4; pl50; internucleoside linkage; phosphorothioate linkage; 2'-O-methoxyethyl sugar; 5-methylcytosine; infection; inflammation; tumour formation; hyperproliferative disorder; cancer; Chediak-Higashi syndrome; metabolic disorder; immunomodulator;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Gaps
                                                                                                                                                                                                                             New antisense oligonucleotides inhibiting the expression of phosphoinositide-3-kinase, regulatory subunit 4, pls0, useful for preventing or treating diseases associated with the subunit, e.g. hyperproliferative disorders.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     .
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Human phosphoinositide-3-kinase regulator subunit 4 p150 probe.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        0.5%; Score 26; DB 1; Length 26; 100.0%; Pred. No. 45;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Sequence 26 BP; 7 A; 3 C; 7 G; 9 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              100.0%; Pred. no.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                2447 CTGAGGAATTTGTCATTGTGAAAGCT 2472
                                                                                                                                                                                                                                                                                                 Example 13; SEQ ID NO 7; 62pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CTGAGGAATTTGTCATTGTGAAAGCT 26
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        gene therapy; ss; probe
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ADL34561 standard; DNA; 26 BP
                                                                                            31-MAY-2002; 2002US-00160786.
                                                                                                                     31-MAY-2002; 2002US-00160786.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Local Similarity 100.
Les 26, Conservative
                                                                                                                                                (ISIS-) ISIS PHARM INC
                                                                                                                                                                           Freier SM, Dobie KW;
                                                                                                                                                                                                   WPI; 2004-051923/05.
                                       US2003225013-A1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Key
modified_base
              Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ношо варіепв
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                17-JUN-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         cytostatic,
                                                                  04-DEC-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ADL34561;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Best Loc
Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 RESULT 14
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ADL34561
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             14X8X4444441
ઠે
```

```
This invention describes a novel antisense oligonucleotides which specifically hybridises to and inhibits the expression of human phosphoinositide-3 kinase, regulatory subunit 4, p150. The phosphoinositide-3 kinase, regulatory subunit 4, p150. The coligonucleotides comprises at least one modified internucleoside linkage, preferably a phosphorothioate linkage. It also comprises at least one modified sugar molety, preferably a 2'-O-methoxyethyl sugar molety. The antisense oligonucleotide further comprises at least one modified nucleobase, preferably a 5-methylcytosine. The antisense oligonucleotide concleobase, preferably a 5-methylcytosine. The antisense oligonucleotide can be used indiagnostics and as research reagents and kits. It can also be used prophylactically, e.g. to prevent or delay infection, inflammation or tumour formation. It can also be used to treat a disease or condition associated with phosphoinositide-3-kinase, regulatory concert, chediak-Higashi syndrome or a metabolic disorder, preferably cancer, chediak-Higashi syndrome or a metabolic disorder. The products of the invention are immunomodulators with cytostatic activity and can be used
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Сарв
                                                                                                                                                                                                                                                                                                                                                        New antisense compound targeted to a nucleic acid molecule encoding phosphoinositide-3-kinase, regulatory subunit 4, p150, useful for treating cancer, Chediak-Higashi syndrome or a metabolic disorder.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Tospovirus resistance; transgenic plant; tomato spotted wilt virus;
Impatiens necrotic spot virus; TSWV; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ô
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  DB 1; Length 26;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Tomato spotted wilt virus S RNA partial sequence #9.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Seguence 26 BP; 7 A; 3 C; 7 G; 9 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               0.5%; Score 26; DB 1
100.0%; Pred. No. 45;
:ive 0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               2447 CTGAGGAATTTGTCATTGTGAAAGCT 2472
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Example 13; SEQ ID NO 7; 60pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CTGAGGAATTTGTCATTGTGAAAGCT 26
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AAC90605/c
ID AAC90605 standard; RNA; 34 BP.
                                                            31-MAY-2002; 2002US-00160786
18-SEP-2003; 2003US-00667022
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               20-MAR-2001 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Fomato spotted wilt virus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Best Local Similarity 100.
Matches 26; Conservative
                                                                                                                                                                                                                           Freier SM, Dobie KW,
                                                                                                                                                                                                                                                                                           WPI; 2004-282523/26.
                                                                                                                                (FREI/) FREIER S M.
                                                                                                                                                              (DOBI/) DOBIE K W.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AAC90605;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Key
```

Ramalingam K;

MA.

gibbs-10-667-022-4.rng

```
two binding moleties having specificity for different binding sites on the same target. (C) is useful for treating euplastic tumour growth and disease associated with angiogenesis or hyperproliferation (claimed). (C) is useful for treating diseases such as arthritis, atherosclerotic plaques, corneal graft neovascularization or ocular diseases. (C) is small and can more easily reach a target. (C) localizes more effectively to the target site than other targeting compounds due to its binding to more than one site on the same target. This sequence represents a DNA oligonucleotide used in the invention.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                The invention relates to a multivalent compound (C) comprising at least
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Multivalent compounds with at least two binding moities having specificity for different binding sites on the same target, useful for treating and diagnosing, e.g. angiogenic and hyperproliferative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ss; deposition unit misalignment; polymeric array synthesis; pulse jet misalignment; printhead misalignment; microarray.
                                                                                                                                                                                                                                                                                                                                                                                      Arbogast C, Bussat P, Dransfield DT, Fan H, Linder K;
Marinelli ER, Nanjappan P, Nunn A, Pillai R, Pochon S,
Sato A, Shrivastava A, Song B, Swenson RE, Von Wronski
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      0.5%; Score 25.4; DB 1; Length 27; 96.3%; Pred. No. 52;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Sequence 27 BP; 0 A; 1 C; 1 G; 25 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Microarray synthesised oligonucleotide #10.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 5023 GTAAAAAAAAAAAAAAAAAAAAAAA 5049
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Example 6; SEQ ID NO 72; 320pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            11-SEP-2003; 2003WO-US028838.
                                                                                                                                                                                                               15-JAN-2003; 2003US-0440201P.
03-MAR-2003; 2003US-00379287.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      25-FEB-2003; 2003US-00374307.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                25-FEB-2003; 2003US-00374307,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ADR48246 standard; DNA; 24
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Query Match
Best Local Similarity 96.5
                                                                                                                                                                                                                                                                                                    (BRAC ) BRACCO INT BV.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         WPI; 2004-593275/57.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       (LEPR/) LEPROUST E M.
                                                                                                                                                                                                                                                                                                                                (DYAX-) DYAX CORP.
                                    WO2004064595-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        US2004170984-A1.
                                                                                              05-AUG-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           18-NOV-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               02-SEP-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                   Sato A, S
Walker SM;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     disorders.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Synthetic.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ADR48246;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                RESULT 17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ADR48246
         HANGE STATE OF THE STATE OF THE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Recombinant DNA construct comprising a DNA sequence encoding an RNA sequence that codes for a tospovirus protein, useful for producing plants with reduced susceptibility to tospovirus infection.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   The present invention provides DNA constructs encoding RNA sequences from a tospovirus which can be used to produce transgenic plants with immunity to tospoviruses. Examples of tospoviruses include the tomato spotted wilt
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ss; primer; antiarthritic; cytostatic; ophthalmological; angiogenesis inhibitor; Kdr tyrosine kinase inhibitor; VEGF antagonist; hepatcoyte growth factor antagonist; multivalent compound; binding motely; euplastic tumour growth, angiogenesis; hyperproliferation; arthritis; atherosclerotic plaque; corneal graft neovascularization; ocular disease.
                                                                                     7. .10 (*1.40g b) b) hourd molety= "binds nucleotides 30-22 of AAC89654" (7. .3\overline{2}
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Gaps
                                                                                                                                                                                                      '*tag= c
'bound_moiety= "binds nucleotides 30-5 of AAC89564"
                                                                                                                                                                                                                                                                                                                      'bound_moiety= "binds nucleotides 1-2 of AAC89654"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Gielen JJL, De Haan PT, Van Grinsven MQJM, Kool AJ;
                                 *tag= a
/bound_moiety= "binds nucleotide 32 of AAC89654"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Duo binding moiety multivalent compound associated primer #1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  DB 1; Length 34;
50;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               5; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Sequence 34 BP; 4 A; 0 C; 2 G; 0 T; 28 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             5032 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          34 ATAAAATAAATAAAAATAAAAACAAAAAC 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             0.5%; Scor.
85.3%; Pred. No. 50,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              virus and the Impatiens necrotic spot virus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Example 9; Fig 16B; 49pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  89US-00431259.
89US-00446024.
91US-00694734.
93US-00143397.
94US-00280903.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        NOVS ) NOVARTIS FINANCE CORP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ADR51048 standard; DNA; 27 BP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 96US-00757011
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Query Match 0.5
Best Local Similarity 85.3
Matches 29; Conservative
                                                                                                                                                                                                                                                            .34
                           *tag=
                                                                                                                                                                                                                                                                                              *tag=
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          WPI; 2001-060031/07.
misc binding
                                                                               misc_binding
                                                                                                                                                                    misc binding
                                                                                                                                                                                                                                                         misc_binding
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              26-NOV-1996;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Peters D, G
Goldbach RW;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    27-JUL-1994;
                                                                                                                                                                                                                                                                                                                                                                             US6150585-A
                                                                                                                                                                                                                                                                                                                                                                                                                                    21-NOV-2000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          14-APR-1993,
26-OCT-1993,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                05-DEC-1989
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               02-MAY-1991
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       21-OCT-2004
```

Synthetic

ADR51048;

ADR51048/

ð g

ö

Gaps

. 0

Indels

```
셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ö
                                                                                                                                                                                                                                                                                                    The invention relates to a method of detection of deposition unit misalignment of an in situ polymeric array synthesis device which comprises synthesising test probe feature(s) on substrate using in situ polymeric array synthesis device, contacting test probe feature with at least two different distinguishably labelled targets and evaluating binding of labelled targets to test probe feature to detect any pulse jet misalignment of polymeric array synthesis device. The method is useful for detecting deposition unit misalignment e.g. printhead misalignment, of an in situ polymeric, e.g. mucleic acid, array synthesis device. The method is easy to use, cost effective. effective at detecting printhead misalignments and may enable immediate detection and/or adjustments of one or more printheads of an in situ nucleic acid array synthesis fluid deposition device if misalignment is detected. The present sequence represents an oligonucleotide synthesised on a microarray.
                                                                                                                                                    Detection of deposition unit misalignment of in situ polymeric array synthesis device, by contacting test probe feature with different distinguishably labeled targets, and evaluating binding of labeled
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Detection of deposition unit misalignment of in situ polymeric array synthesis device, by contacting test probe feature with different
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              se; deposition unit misalignment; polymeric array synthesis;
pulse jet misalignment; printhead misalignment; microarray.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         5%; Score 24; DB 1; Length 24;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Sequence 24 BP; 24 A; 0 C; 0 G; 0 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  100.0%; Prea. ...
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Microarray synthesised oligonucleotide #13.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             5025 AAAAAAAAAAAAAAAAAAAA 5048
                                                                  Kronick MN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Kronick MN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Example 2; Page 16; 36pp; English
                                                                                                                                                                                                                      targets to test probe feature
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ADR48249 standard; DNA; 24 BP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       25-FEB-2003; 2003US-00374307
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              25-FEB-2003; 2003US-00374307
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         (first entry)
                                                                Leproust EM, Amorese DA,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Amorese DA,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    24; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    LEPR/) LEPROUST E M.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AMORESE D A. KRONICK M N.
AMORESE D A. KRONICK M N.
                                                                                                           WPI; 2004-634540/61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       WPI; 2004-634540/61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         US2004170984-A1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Leproust EM,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         18-NOV-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    02-SEP-2004.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Synthetic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ADR48249;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                KRON/)
                      KRON/)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AMOR/
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ADRAGAS ADRAGA A
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Matches
ઠે
```

```
ö
                                                                                                                                                                        The invention relates to a method of detection of deposition unit misalignment of an in situ polymeric array synthesis device which comprises synthesis device, oncacting test probe feature(s) on substrate using in situ polymeric array synthesis device, contacting test probe feature with at least two different distinguishably labelled targets and evaluating binding of labelled targets to test probe feature to detect any pulse jet misalignment of polymeric array synthesis device. The method is useful for detecting deposition unit misalignment e.g. printhead misalignment, of an in situ polymeric, e.g. nucleic acid, array synthesis device. The method is easy to use, cost effective effective at detecting printhead misalignments and may enable immediate detection and/or adjustments of one or more printheads of an in situ nucleic acid array synthesis fluid deposition device if misalignment is detected. The present sequence represents an oligonucleotide synthesised on a microarray.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         PCR primers MB2 (AAT68809) and MB3 (AAT68810) are based on the nucleotide sequences for the Bacillus amyloliquefaciens sacB gene and the polylinker region of pBES04. MB3 overlaps Arg codon 331 of the sacB(BamP) W29 mutant gene (see also AAT68806) and was designed to convert codon 331 into a Leu codon in the amplified DNA. The primers were used to amplify a region of plasmid pMGB161delcat1 that included the 473 bp between the B88HII and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Positive selection for transformed Gram positive bacteria, especially Bacillus - useful for cloning heterologous genes encoding e.g. industrial enzymes, immunoglobulin(8), etc.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Сарв
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Gram-positive bacterium; positive selection vector; levansucrase; Bacillus amyloliquefaciens; signal peptide cleavage; sacB(BamP)W29; primer; PCR; polymerase chain reaction; ss.
distinguishably labeled targets, and evaluating binding of labeled targets to test probe feature.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 DB 1; Length 24; 67;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Levansucrase mutant sacB(BamP)W29 gene PCR primer MB2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sequence 24 BP; 0 A; 0 C; 0 G; 24 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          0.5%; Sco.
100.0%; Pred. No. co.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   5025 AAAAAAAAAAAAAAAAAAAA 5048
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Е І.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                24 AAAAAAAAAAAAAAAAAAAAA 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Example 5; Page 30; 54pp; English.
                                                                                                         Example 2; Page 16; 36pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ႘
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     96WO-US017636
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            (DUPO ) DU PONT DE NEMOURS &
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         95US-0006201P
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AAT68809 standard; DNA; 30
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Bramucci MG, Nagarajan V;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Query Match
Best Local Similarity 100.
Matches 24; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           WPI; 1997-272125/24.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      WO9716558-A1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     31-OCT-1996;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         03-NOV-1995;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      07-AUG-1997
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              09-MAY-1997.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Synthetic.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AAT68809;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       RESULT 19
```

regulatory subunit 4, p150 polypeptide of the invention.

Sequence 23 BP; 9 A; 4 C; 6 G; 4 T; 0 U; 0 Other;

SXS

ö

```
ö
BamHI restriction sites. The mutation showed that the polymerase activity of the sacB(BamP)W29 gene product is necessary for inhibition of growth on medium with sucrose by sacB(BamP)W29. Inactivation of sacB(BamP)W29 could be used to select for growth of colonies of B. subtilis with cloned
                                                                                                                                                                                                                                                                                                                                                                   Human; phosphoinositide-3-kinase regulatory subunit 4; p150; P13K; P13 kinase; PCR; ss; antisense oligonucleotide; phosphorothioate linkage; J-O-methoxyethyl sugar moiety; 5-methylcytosine; hyperproliferative disorder; cancer; Chediak-Higashi syndrome; neurodegenerative disorder; metabolic disorders; inflammation; cytostatic; immunomodulator; neurodegenerative; antimicrobial; antiinflammatory; primer.
                                                                                                                                          Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               New antisense oligonucleotides inhibiting the expression of phosphoinositide-3-kinase, regulatory subunit 4, pl50, useful for preventing or treating diseases associated with the subunit, e.g. hyperproliferative disorders.
                                                                                                                                          .
0
                                                                                                            DB 1; Length 30; 72;
                                                                                                                                         0; Indels
                                                                                                                                                                                                                                                                                                                                           Human PI3K regulatory subunit 4, p150 DNA PCR primer #2.
                                                                                 Sequence 30 BP; 6 A; 10 C; 9 G; 5 T; 0 U; 0 Other;
                                                                                                                                       0; Mismatches
                                                                                                                            Pred. No.
                                                                                                            0.5%; Score 24;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Example 13; SEQ ID NO 6; 62pp; English.
                                                                                                                                                               1 GGATCCCCGGGCTGCAGGAATTC 24
                                                                                                                                                                                     4 GGATCCCCGGGCTGCAGGAATTC 27
                                                                                                                                                                                                                                                               BP.
                                                                                                                            100.0%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             31-MAY-2002; 2002US-00160786.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        31-MAY-2002; 2002US-00160786.
                                                                                                                                                                                                                                                              ADH26671 standard; DNA; 23
                                                                                                                                                                                                                                                                                                                 (first entry)
                                                                                                                       Local Similarity 100.
Les 24; Conservative
                                                      inserts in sacB(BamP) W29
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   (ISIS-) ISIS PHARM INC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Freier SM, Dobie KW;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        WPI; 2004-051923/05.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         US2003225013-A1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  04-DEC-2003,
                                                                                                                                                                                                                                                                                                                 11-MAR-2004
                                                                                                                                                                                                                                                                                       ADH26671;
                                                                                                            Query Match
                                                                                                                            Best Loc
Matches
                                                                                                                                                                                                                                 RESULT 20
                                                                                                                                                                                                                                                 ADH26671,
 888888888
                                                                                                                                                                 ò
                                                                                                                                                                                           셤
```

The invention relates to a compound targeted to a nucleic acid molecule encoding human phosphoinositide-3-kinase (PI3K) regulatory subunit 4, p150. The compound is an antisense oligonucleotide that specifically hybridises with a nucleic acid molecule encoding PI3K regulatory subunit 4, p150 and inhibits expression of the polypeptide. The antisense oligonucleotide comprises at least one modified internucleoside linkage i.e. a phosphorothioate linkage, at least one modified sugar moiety, preferably a 2'-0-methoxyethyl sugar moiety, or at least one modified comprising a 5-methylcytosine. The antisense compounds are useful for modulating the expression of PI3K regulatory subunit 4, p150 and for preventing or treating hyperproliferative disorders (i.e. cancer), Checklak-Higashi syndrome, neurodegenerative disorders and metabolic disorders. These may also be used in research and diagnostics and in preventing or delaying infection or inflammation. This sequence represents a PCR primer used to amplify DNA encoding the human PI3K

```
The invention relates to a compound targeted to a nucleic acid molecule encoding human phosphoinositide-3-kinase (PI3K) regulatory subunit 4, p150 July 1 The compound is an antisense oligonucleotide that specifically hybridises with a nucleic acid molecule encoding PI3K regulatory subunit 4, p150 and inhibits expression of the polypebide. The antisense oligonucleotide comprises at least one modified internucleoside linkage i.e. a phosphorothioate linkage, at least one modified sugar moiety, preferably a 2'-O-methoxyethyl sugar moiety, or at least one modified nucleobase comprising a 5-methylcytosine. The antisense compounds are useful for modulating the expression of P13K regulatory subunit 4, p150 and for preventing or treating hyperproliferative disorders and metal for modulating or treating hyperproliferative disorders and modified may also be used in research and diagnostics and in preventing or delaying infection or inflammation. This sequence represents a PCR primer used to amplify DNA encoding the human P13K regulatory subunit 4, p150 polypeptide of the invention.
                                                                                                                                                                                                                                                                                                                                                     Human, phosphoinositide-3-kinase regulatory subunit 4, p150, PI3K, P13 Kinase; PCR; ss; antisense oligonucleotide; phosphorothioate linkage; 2'-O-methoxyethyl sugar moiety; 5-methylorycosine; hyperproliferative disorder; cancer; Chediak-Higashi syndrome; neurodegenerative disorder; metabolic disorders; inflammation;
                                             Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   for
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            New antisense oligonucleotides inhibiting the expression of phosphoinostitide-3-kinase, regulatory subunit 4, p150, useful for preventing or treating diseases associated with the subunit, e.g. hyperproliferative disorders.
                                           ;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                     cytostatic; immunomodulator; neurodegenerative; antimicrobial;
   0.5%; Score 23; DB 1; Length 23; 100.0%; Pred. No. 82;
                                         Indels
                                                                                                                                                                                                                                                                                                                       Human PI3K regulatory subunit 4, p150 DNA PCR primer #1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Sequence 23 BP; 6 A; 5 C; 6 G; 6 T; 0 U; 0 Other;
                                         Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Example 13; SEQ ID NO 5; 62pp; English.
                                                                            2476 TAIGCCCTIACTIGIAIGCCA 2498
                                                                                                       23 TATGCCTTACTTGTATGTGCCA 1
   100.0%; PAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       31-MAY-2002; 2002US-00160786.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             31-MAY-2002; 2002US-00160786.
                                                                                                                                                                                                         ADH26670 standard; DNA; 23
                                                                                                                                                                                                                                                                                    (first entry)
                                       Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    antiinflammatory, primer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              (ISIS-) ISIS PHARM INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Dobie KW;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        WPI; 2004-051923/05.
                     Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 US2003225013-A1,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Homo sapiens.
                                                                                                                                                                                                                                                                                  11-MAR-2004
                                       23;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    04-DEC-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Freier SM,
                                                                                                                                                                                                                                               ADH26670;
Query Match
                       Local
                                     Matches
                                                                                                                                                                        RESULT 21
                                                                                                                                                                                            ADH26670
                                                                                                           g
                                                                                                                                                                                                           ò
```

```
This invention describes a novel antisense oligonucleotides which specifically hybridises to and inhibits the expression of human phosphornositide. Stranse, regulatory subunit 4, pls0. The oligonucleotides comprises at least one modified internucleoside linkage, preferably a phosphorothioate linkage. It also comprises at least one modified sugar molety, preferably a 2'-O-methoxyethyl sugar molety. The antisense oligonucleotide further comprises at least one modified nucleobase, preferably a 5-methylcytosine. The antisense oligonucleotide further comprises at least one modified nucleobase, preferably a 5-methylcytosine. The antisense oligonucleotide can be used in diagnostics and as research reagents and kits. It can also be used prophylactically, e.g. to prevent or delay infection, inflammation or tumour formation. It can also be used to treat a disease or condition associated with phosphoinositide-3-kinase, regulatory cabunit 4, pls0, e.g. hyperproliferative disorder, preferably cancer, chediak-Higashi syndrome or a metabolic disorder. The products of the invention are immunomodulators with cytostatic activity and can be used
                                                        ö
                                                                                                                                                                                                                                                                                                                                                                                        antisense; inhibitor; hybridisation; human; phosphoinositide-3-kinase; regulatory subunit 4; p150; internucleoside linkage; phosphorothicate linkage; 2'-O-methoxyethyl sugar; 5-methylcytosine; infection; inflammation; tumour formation; hyperproliferative disorder; cancer; Chediak-Higashi syndrome; metabolic disorder; immunomodulator; cytostatic; gene therapy; ss; primer; PCR.
                                                                                                                                                                                                                                                                                                                                                   Human phosphoinositide-3-kinase regulator subunit 4 p150 PCR primer 2.
                                                      Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 New antisense compound targeted to a nucleic acid molecule encoding phosphoinositide-3-kinase, regulatory subunit 4, p150, useful for treating cancer, Chediak-Higashi syndrome or a metabolic disorder.
                                                        ;
0
                  Length 23;
                                                      0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Sequence 23 BP; 9 A; 4 C; 6 G; 4 T; 0 U; 0 Other;
                Score 23; DB 1;
Pred. No. 82;
0; Mismatches 0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Example 13; SEQ ID NO 6; 60pp; English.
                                                                                             CTGCTGCAACAAGGTCTTAGTGA 2444
                                                                                                                                  1 crecrecaacaacarcrracrea 23
0.5%; Scc...
100.0%; Pred
0; M
                                                                                                                                                                                                                                     ВЪ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  18-SEP-2003; 2003US-00667022.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        31-MAY-2002; 2002US-00160786
                                                                                                                                                                                                                                 ADL34560 standard; DNA; 23
                                                                                                                                                                                                                                                                                                            (first entry)
                                                      23; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Freier SM, Dobie KW;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            WPI; 2004-282523/26
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           (FREI/) FREIER S M. (DOBI/) DOBIE K W.
              Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    for gene therapy.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      US2004063657-A1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Homo sapiens,
                                                                                                                                                                                                                                                                                                              17-JUN-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           01-APR-2004.
                                                                                             2422
                                                                                                                                                                                                                                                                        ADL34560;
                                                    Matches
                                                                                                                                                                                             RESULT 22
                                                                                                                                                                                                               ADL34560/
                                                                                                                                  염
                                                                                                                                                                                                                                   ઠે
```

```
This invention describes a novel antisense oligonucleotides which specifically hybridises to and inhibits the expression of human phosphoinositide-1-kinase, regulatory subunit 4, p150. The phosphoinositide at least one modified internucleoside linkage, oligonucleotides comprises at least to modified internucleoside linkage, preferably a phosphorothioate linkage. It also comprises at least one modified modified sugar molety, preferably a 2'-O-methoxyethyl sugar molety. The antisense oligonucleotide further comprises at least one modified nucleobase, preferably a 5-methylcytosine. The antisense oligonucleotide can be used in diagnostics and as research reagents and kits. It can also be used prophylactically, e.g. to prevent or delay infection, inflammation or tumour formation. It can also be used to creat a disease or condition associated with phosphoinositide-3-kinase, regulatory cubenit 4, p150, e.g. hyperproliferative disorder, preferably cancer, chediak-Higashi syndrome or a metabolic disorder. The products of the invention are immunomodulators with cytostatic activity and can be used
                                                                                                                                                                                                                                                                                      antisense; inhibitor; hybridisation; human; phosphoinositide-3-kinase; regulatory subunit 4; p150; internucleoside linkage; phosphorchioare linkage; 2'-O-methoxyethyl sugar; S-methylcytosine; infection; inflammation; tumour formation; hyperproliferative disorder; cancer; Chediak-Higashi syndrome; metabolic disorder; immunomodulator; cytostatic; gene therapy; ss; primer; PCR.
                                                                                                                                                                                                                                                  Human phosphoinositide-3-kinase regulator subunit 4 p150 PCR primer 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Gарв
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        New antisense compound targeted to a nucleic acid molecule encoding phosphoinositide-3-kinase, regulatory subunit 4, p150, useful for treating cancer, Chediak-Higashi syndrome or a metabolic disorder.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ô
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            0.5%; Score 23; DB 1; Length 23; 100.0%; Pred. No. 82;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Sequence 23 BP; 6 A; 5 C; 6 G; 6 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Local Similarity 100.0%; Pred. No. 62; es 23; Conservative 0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Example 13; SEQ ID NO 5; 60pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               2422 CTGCTGCAACAAGGTCTTAGTGA 2444
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CTGCTGCAACAAGGTCTTAGTGA 23
TATGCCCTTACTTGTATGTGCCA
                                                                                                                            ADL34559 standard; DNA; 23 BP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      31-MAY-2002; 2002US-00160786.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              18-SEP-2003; 2003US-00667022
                                                                                                                                                                                                         17-JUN-2004 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Freier SM, Dobie KW;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                WPI; 2004-282523/26.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               (FREI/) FREIER S M.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  (DOBI/) DOBIE K W.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   for gene therapy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 US2004063657-A1.
                                                                                                                                                                                                                                                                                                                                                                                                                                          Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       01-APR-2004.
                                                                                                                                                                  ADL34559;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Best Loc
Matches
                                                                                                    ADL34559
                                                                                                                                             g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ઠે
```

Gaps

;; 0

0.5%; Score 23; DB 1; Length 23; 100.0%; Pred. No. 82; ive 0; Mismatches 0; Indels

24

ö

2476 TATGCCCTTACTTGTATGTGCCA 2498

23; Conservative

Local Similarity

Query Match Best Local 8 Matches gibbs-10-667-022-4.rng

```
PCR primers AAV03153-54 were used to amplify a terminator region of the PR-la gene from tobacco. This fragment was used to create a a recombinant gene in which a gene encoding an anti-bacterial peptide (e.g. sarcotoxin la) is bound to a plant gene via a hinge region of tobacco chitinase, an expression cassette in which the recombinant gene is bound to a plant promoter, and a gene having the expression cassette and a drug resistance gene linked to a plant promoter which is constitutively expressed. Plants transformed with this expression vector are resistant to pathogenic fungi
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Plant resistant to pathogenic fungi and bacteria - especially containing insect gene encoding sarcotoxin la.
                                                                                                                 PR-1a gene terminator; tobacco; antibacterial peptide; sarcotoxin la;
hinge region; tobacco chitinase; plant promoter; plant resistance;
pathogenic fungi; pathogenic bacteria; PCR primer; ss.
                                                                PCR primer BKSBE used to amplify a region of the PR-la gene.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       (NORQ ) NAT INST AGROBIOLOGICAL RESOURCES.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Example 1; Page 14; 32pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        WPI; 1997-473191/44.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Mitsuhara I,
                                                                                                                                                                                                                                                                                                                                                                           27-FEB-1997;
                                                                                                                                                                                                                                                                                                                                                                                                                            25-MAR-1996;
                                                                                                                                                                                                                                                                                                                                                                                                                                                    17-JUL-1996;
                                                                                                                                                                                                                                                                                                                           01-OCT-1997
                                                                                                                                                                                                                                                                     EP798381-A2
                                                                                                                                                                                                                       Synthetic.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AAV60992;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Best Loc
Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          RESULT 26
             EXECUTE OF STANDARD S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                The present invention relates to a method for determining if a gene product or compound is involved in preventing replication error in a cell. The method involves providing a cell with a specific inhibitor for a gene product or with a compound and determining the expression level of a marker gene in the cell, where the expression level of the marker gene useful in gene therapy and for treating a subject having tumours or cancer. The present sequence is a Caenorhabditis elegans heat-shock promoter DNA. This sequence is used to illustrate the method of
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Determining if a gene product/compound is involved in preventing replication error in a cell, useful for treating cancer, comprises determining expression level of a marker gene in a cell treated with gene product inhibitor/compound.
                                                                                                                                                                                                                            Nematode; gene therapy; tumour; cancer; heat-shock promoter; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Score 22; DB 1; Length 25; Pred. No. 1e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                            /*tag= b
/note= "N can be repeated Y times"
                                                                                                                                                                                                                                                                                                                                                                                           *tag= a
note= "N can be repeated X times"
                                                                                                                                                                         Caenorhabditis elegans heat-shock promoter DNA #1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Sequence 25 BP; 21 A; 0 C; 1 G; 1 T; 0 U; 2 Other;
                                                                                                                                                                                                                                                                                                                                   Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Disclosure, Fig 3; 25pp; English
                        ADR44220 standard; DNA; 25 BP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      22-MAY-2001; 2001EP-00201936.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       2002WO-NL000322.
2002WO-WO095071.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         21-NOV-2003; 2003US-00719995
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Plasterk RHA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         0.4%;
                                                                                                                           (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TIJSTERMAN M.
PLASTERK R H A.
                                                                                                                                                                                                                                                                                                                                                                                      *tag=
                                                                                                                                                                                                                                                                             Caenorhabditis elegans
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            WPI; 2004-603554/58.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        US2004161782-A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Tijsterman M,
                                                                                                                         04-NOV-2004
                                                                                                                                                                                                                                                                                                                                                        misc feature
                                                                                                                                                                                                                                                                                                                                                                                                                                       misc_feature
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    22-MAY-2002;
28-NOV-2002;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        19-AUG-2004
                                                                      ADR44220;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             (TIJS/)
(PLAS/)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Query Match
ADR44220
```

Ohshima M;

Ohashi Y,

97EP-00301299. 96JP-00068809, 96JP-00187763.

```
ö
                                                                                                                                                                                                                                                                  Barnase; barstar; IPCR; inverse polymerase chain reaction; phenotype; transgenic plant; hybrid seed; male sterile plant; active enzyme; regulatory protein; embryoless seed; herbicide resistance; primer; ss.
                                                      Gaps
                                                     ÷
                        Score 21, DB 1; Length 21;
Pred. No. 1.2e+02;
0; Mismatches 0; Indels
                                                  0; Indels
                                                                                                                                                                                                                                           Inverse PCR primer Ubqla from WO9837211 Example 1.
Sequence 21 BP; 3 A; 8 C; 6 G; 4 T; 0 U; 0 Other;
                                                                            24
                                                                                                   21
                                    l Similarity 100.0%; P. 21; Conservative 0;
                                                                          4 TCCCCCGGGCTGCAGGAATTC
                                                                                                                                                                                                                                                                                                                                                                                                  98WO-GB000542.
                           0.48;
                                                                                                                                                               AAV60992 standard; DNA; 24
                                                                                                                                                                                                                   (first entry)
                                    Local Similarity
                                                                                                                                                                                                                                                                                                                                               WO9837211-A1
                                                                                                                                                                                                                                                                                                                                                                                                  20-FEB-1998;
                                                                                                                                                                                                                    03-DEC-1998
                                                                                                                                                                                                                                                                                                                                                                         27-AUG-1998
                                                                                                                                                                                                                                                                                                                         Synthetic.
                                                                                                                                                               X4X5X5X5X5X5X5X5X5X5X5X
```

ö

Gaps

· 0

2; Indels

0; Mismatches

22; Conservative

Local Similarity

Best Loca Matches

5022 TGTAAAAAAAAAAAAAAAAAAA 5045 

AAV03154 standard; DNA; 21 BP

RESULT 25

d ઠે

AAV03154

AAV03154 ID AAV0 XX AC AAV0 XX

```
ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            8
                                                                                                                                                                                                                                                                                                                              The present invention describes a pair of parent plants for producing seeds comprising: (a) a first parent plant containing at least 1 gene seeds comprising: (b) a second parent plant containing at least 1 gene sequence encoding a polypeptide or protein B; where the polypeptides A and B, when expressed in separate plant containing at least 1 gene sequence encoding a polypeptide or protein B; where the polypeptides A and B, when expressed in separate plants, do not form an active enzyme, a regulatory protein or protein which affects the structural integrity of a cell, but when expressed in the same plant do form an active enzyme, regulatory protein, or protein which affects the structural integrity of a cell. Also described is a method for producing a plant having a desired phenotype by virtue of an active enzyme, a regulatory protein or a protein which affects the structural integrity of a cell. Comprising crossing a first line with a second line where the first line contains one or more gene sequences encoding a polypeptide or protein. A but which line does not have the desired phenotype and where
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          the second line contains one or more gene sequences encoding a polypeptide or protein B which is complementary to the polypeptide or protein A but which line does not have the desired phenotype. The method can be used for producing plants having altered phenotypes, e.g. malesterility, embryoless seeds, altered biochemical (e.g. fatty acid) composition or herbicide resistance. The present sequence represents an inverse PCR (IPCR) primer which is used in an example from the present
                                                                                                                                                                                          Production of transgenic plants having a desired phenotype - by using a pair of parent plants which each produce a polypeptide which complement
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Human; GM2 activation protein 14; recombinant production, malignant tumour; cancer; blood disease; HIV infection; human immunodeficiency virus; immunodefic, inflammatory condition; familial cretinism; embryonic disease; developmental disorder; nervous system disorder; gene therapy; cytostatic; anti-HIV; anti-inflammatory; immunomodulator; reverse transcription-PCR;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Human GM2 activation protein 14 RT-PCR primer, SEQ ID NO:4.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Score 21; DB 1; Length 24;
Pred. No. 1.2e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Sequence 24 BP; 5 A; 7 C; 8 G; 4 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    0.4%; Scor.
100.0%; Pred. No.
                                                                                                  Betzner AS;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 GGATCCCCCGGGCTGCAGGAA 21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 GGATCCCCCGGGCTGCAGGAA 24
                                                                                                                                                                                                                                                                                           Example 1; Fig 1G; 58pp; English.
                                                                                                Perez P, Huttner E,
  97GB-00003681
                                                (GENE-) GENE SHEARS PTY LTD
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 :435/c
ABA02435 standard; DNA; 24
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 21; Conservative
                                                                                                                                                                                                                                             each other when crossed.
                                                                                                                                             WPI; 1998-467572/40.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  RT-PCR primer; ss
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                40200187915-A1
  21-FEB-1997;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     04-MAR-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                22-NOV-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ABA02435;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Local
                                                                                                Paul W,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ABA02435/o

ID ABA02435/o

XX

AC ABA02

AC AB
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Matches
õ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            셤
```

```
The Invention retailed to American and a method for the recombinant production of GM2 activation protein 14. The protein has a molecular weight of 14 MD. The present inventionally discloses an antagonist of GM2 activation protein 14 for therapeutic use, and an antibody which specifically binds to GM2 activation protein 14 for therapeutic use, and an antibody which specifically binds to GM2 activation protein 14. GM2 activation protein 14, and nucleotides which encode it may be used for treating a variety of disease, which small an antignant tumours, blood diseases, HIV (human immunodeficiency virus) infection, immune disorders, inflammatory conditions, familial crectingm, embryonic and developmental disorders, and nervous system disorders. The protein may also be used to screen for modulators of its activity or for peptide fingerprinting identification. The polynucleotide can be used as a primer for nucleic coid amplification reactions or as a probe for hybridisation reactions, or in producing gene chips or microarrays. Sequences ABA02434-ABA02435 corrections or as a probe protein and an antibution-pCR (RT-PCR) primers used in an antibution property or activation protein
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                exemplification of the invention to isolate human GM2 activation protein
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Human, molecular chaperone cpn60 protein 14; chaperone; tumour;
haemopathy; HIV; infection; immunological disease; inflammation; PCR;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                           Human GM2 activation protein 14 and encoding polynucleotide, used in diagnosis and treatment of malignant tumors, hemopathy, human immunodeficiency virus infection, immunological diseases and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 The invention relates to human GM2 activation protein 14 (AAM52936)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Human molecular chaperone cpn60 protein 14 PCR primer SEQ ID NO
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         0.4%; Score 21; DB 1; Length 24;
100.0%; Pred. No. 1.2e+02;
rative 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Sequence 24 BP; 2 A; 10 C; 9 G; 3 T; 0 U; 0 Other;
                                                                                                                                                                     (BIOW-) BIOWINDOW GENE DEV INC SHANGHAI.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  (BODE-) BODE GENE DEV CO LTD SHANGHAI.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       5065 CTCGAGGGGGGCCCGGTACC 5085
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Example 2; Page 11; 37pp; Chinese.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            m
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CTCGAGGGGGGCCCGGTACC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ABA95961 standard; DNA; 24 BP
26-FEB-2001; 2001WO-CN000228.
                                                                                    02-MAR-2000; 2000CN-00111833.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             19-MAY-2000; 2000CN-00115777
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 19-MAY-2000; 2000CN-00115777
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   19-JUN-2002 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Local Similarity 100.
1es 21; Conservative
                                                                                                                                                                                                                                                                                                                                      WPI; 2002-062368/08.
                                                                                                                                                                                                                                                     Xie Y;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            inflammation
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CN1324833-A
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        05-DEC-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  primer; 88.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ABA95961;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            14 CDNA
                                                                                                                                                                                                                                                     Mao Y,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Matches
```

```
8888888
                                                                                                                             à
                                                                                                                                                  셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         The invention relates to human zinc finger protein 12.54 (ABPSB744) and nucleic acids encoding it (ABZS7353). The protein has a molecular weight of 12.54 kD. The invention also relates to a method for the recombinant production of the protein, an antagonist of the protein, and the use of the protein, gene and antagonist in therapeutic applications. Zinc finger protein, 12.54 can be used in the treatment of a variety of diseases such
                                                                                                                                                                                                                                                                                              ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Polypeptide-human zinc finger protein 12.54 and polynucleotide for coding
                                         New polypeptide human chapronin CPN 60 protein 14 and polynucleotides for encoding same.
                                                                                                   The invention relates to human molecular chaperone cpn60 protein 14, polynucleotide encoding for this polypeptide and a method for producing this polypeptide by using DNA recombinant techniques. The invention also discloses the method for curing several diseases, such as malignant tumour, haemopathy, HIV infection, immunological disease and various inflammations by using the polypeptide. The invention also discloses an antagonist for resisting said polypeptide and its therapeutic action and the application of polynucleotide encoding this novel human molecular chaperone cpn60 protein 14. The present sequence is that of a human molecular chaperone cpn60 protein 14 PCR primer, useful in examples of
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Human; zinc finger protein 12.54; recombinant production; gene therapy; cancer; tumour; human immunodeficiency virus; HIV infection; cytostatic; reverse transcription-PCR; RT-PCR; primer; 8s.
                                                                                                                                                                                                                                                                                                Gaps
                                                                                                                                                                                                                                                                                                ;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Human zinc finger protein 12.54 RT-PCR primer, SEQ ID NO:3.
                                                                                                                                                                                                                                                                      0.4%; Score 21; DB 1; Length 24; 100.0%; Pred. No. 1.2e+02; tive 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                 Sequence 24 BP; 2 A; 10 C; 9 G; 3 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Example 2; Page 17 (Disclosure); 32pp; Chinese.
                                                                                Example 2; Page 17 (Disclosure); 32pp; Chinese.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   (BODE-) BODE GENE DEV CO LTD SHANGHAI
                                                                                                                                                                                                                                                                                                                      5065 CTCGAGGGGGGCCCGGTACC 5085
                                                                                                                                                                                                                                                                                                                                                                                                         BP,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            05-JAN-2001; 2001CN-00105045
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       05-JAN-2001; 2001CN-00105045
                                                                                                                                                                                                                                                                                                                                                                                                         ABZ57354 standard; DNA; 24
                                                                                                                                                                                                                                                                                                                                                                                                                                                        (first entry)
                                                                                                                                                                                                                                                                                     Best Local Similarity 100.
Matches 21; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  WPI; 2003-000314/01.
                           WPI; 2002-217511/28
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Mao Y, Xie Y;
       Xie Y;
                                                                                                                                                                                                                              the invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CN1363573-A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               14-AUG-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                        01-APR-2003
                                                                                                                                                                                                                                                                                                                                                 23
                                                                                                                                                                                                                                                                                                                                                                                                                                   ABZ57354;
                                                                                                                                                                                                                                                                               Query Match
        Mao Y,
                                                                                                                                                                                                                                                                                                                                                                                   RESULT 29
                                                                                                                                                                                                                                                                                                                                                                                                            ઠે
                                                                                                                                                                                                                                                                                                                                                 셤
```

```
The present invention relates to a method for determining if a gene product or compound is involved in preventing replication error in a cell. The method involves providing a cell with a specific inhibitor for a gene product or with a compound and determining the expression level of a marker gene in the cell, where the expression level of the marker gene is dependent on the occurrence of a replication error. The invention is useful in gene therapy and for treating a subject having tumours or cancer. The present sequence is a Gaenorhabditis elegans heat-shock promoter DNA. This sequence is used to illustrate the method of invention.
                                                                                                                                                                                                                                                 ö
        ABZ57354-ABZ57355 represent reverse transcription-PCR (RT-PCR) primers used in an exemplification of the invention to isolate human zinc finger protein 12.54 cDNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Determining if a gene product/compound is involved in preventing replication error in a cell, useful for treating cancer, comprises determining expression level of a marker gene in a cell treated with a gene product inhibitor/compound.
as cancer and HIV (human immunodeficiency virus) infection. Sequences ABZ57354-ABZ57355 represent reverse transcription-PCR (RT-PCR) primers
                                                                                                                                                                                                                                                    Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Nematode; gene therapy; tumour; cancer; heat-shock promoter; ss.
                                                                                                                                                                                                                                                    ;
                                                                                                                                                                                                Length 24;
                                                                                                                                                                                                                                                 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    /*tag= b
/note= "N can be repeated Y times"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            /*tag= a
/note= "N can be repeated X times"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Caenorhabditis elegans heat-shock promoter DNA #2.
                                                                                                                                          Sequence 24 BP; 2 A; 10 C; 8 G; 4 T; 0 U; 0 Other;
                                                                                                                                                                                             0.4%; Score 21; DB 1; Le
100.0%; Pred. No. 1.2e+02;
Live 0; Mismatches 0;
                                                                                                                                                                                                                                                                                                           5065 CTCGAGGGGGCCCGGTACC 5085
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Disclosure; Fig 3; 25pp; English.
                                                                                                                                                                                                                                                                                                                                                CTCGAGGGGGGCCCGGTACC 4
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            踞.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   22-MAY-2001; 2001EP-00201936.
22-MAY-2002; 2002WO-NL000322.
28-NOV-2002; 2002WO-WO095071.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               21-NOV-2003; 2003US-00719995.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Tijsterman M, Plasterk RHA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ADR44221 standard; DNA; 24
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         (first entry)
                                                                                                                                                                                                                                                             21; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                (TIJS/) TIJSTERMAN M.
(PLAS/) PLASTERK R H A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Caenorhabditis elegans.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    WPI; 2004-603554/58.
                                                                                                                                                                                                            Query Match
Best Local Similarity
Matches 21; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             US2004161782-A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        misc feature
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        feature
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 19-AUG-2004.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         04-NOV-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ADR44221;
                                                                                                                                                                                                                                                                                                                                                                             24
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        misc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ADR44221
```

င္ဟ

RESULT 31 ABA95469,

ò 셤

```
This invention relates to novel mutant serum paraoxonase (PONI) nucleic acid molecules and the encoded proteins thereof. Specifically, it refers to enzymes that are calcium dependent phosphotriseterases essential to the detoxification process of orapportisephotriseterases essential to praoxon and the nerve agents arrin and soman. The present invention describes a method to identify mutated PONs that exhibit substantially identical (or improved) substrate specificity in comparison with the wild type PON and also those mutants that do not form aggregates when expressed in bacteria. In particular, the method employed an in vitro expressed in bacteria. In particular, and maintaining substrate binding. These mutants have been found to be useful for treating or preventing PONI-related diseases including hyperlipidaemia.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               atherosclerosis, neurological disease (e.g. Alzheimer's disease, neurofibromatosis, Huntington's disease, depression, amyotrophic lateral sclerosis, multiple sclerosis, stroke, parkinson's disease or multipliated and an organophosphate poisoning. Accordingly, they exhibit antilipaemic, antiarteriosclerotic, neuroprotective, notropic, cytostatic, anticonvulsant, antidepressant and antiparkinsonian activities, as well as being an antidote in a case of poisoning. This oligonucleotide sequence is a PCR primer used for the
                                                                                    PCR; primer; 88; paraoxonase; PONI; praoxon; nerve agent; sarin; soman; in vitro evolution; hyperlipidaemia; atherosclerosis; neurological disease; Alzheimer's disease; neurofibromatosis; Huntington's disease; depression; amyotrophic lateral sclerosis; multiple sclerosis; stroke; Parkinson's disease; multi-infarct dementia; encer; organophosphate poisoning; antilpaemic; antiarteriosclerotic; antiparkinsonian; antidepressant; antibarkinsonian; antidepressant;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Novel mutant of PON enzyme exhibiting increased substrate specificity to
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           PON substrate, useful for treating or preventing PON1-related diseases e.g., hyperlipidemia, atherosclerosis, neurological disease or cancer.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            cloning and expression of a wild type PON1 gene of the invention.
                                                primer used in the cloning of PON1 genes Seg 11
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 0.4%; Score 20.2; DB 1; Length 22; 95.2%; Pred. No. 1.4e+02; ative 1; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Sequence 22 BP; 0 A; 0 C; 0 G; 20 T; 0 U; 2 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Sussman JL,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Example 1; SEQ ID NO 11; 240pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Gaydukov L,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    5024 TAAAAAAAAAAAAAAAAA 5044
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                (YEDA ) YEDA RES & DEV CO LTD
                                                                                                                                                                                                                                                                                                                                                                                                                                              04-MAR-2004; 2004WO-IL000216.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          04-MAR-2003; 2003US-0451267P.
22-OCT-2003; 2003US-0512925P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AAF76082 standard; DNA; 20
  (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   20; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Fawfik DS, Aharoni A,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            WPI; 2004-668627/65.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                WO2004078991-A2.
                                             Oligo dT PCR
  02-DEC-2004
                                                                                                                                                                                                                                                                                                                                                                                                   16-SEP-2004
                                                                                                                                                                                                                                                                                                       Synthetic.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   RESULT 33
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AAF76082
ID AAF7
  셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ò
                                                                                              ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Human natural killer cell enhancing factor B13.64 and encoded polynucleotide, used in diagnosis and treatment of malignant tumors, hemopathy, human immunodeficiency virus infection, immunological diseases
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          factor B13.64 (see AAM48184). The enhancing factor and its coding sequence are useful in the diagnosis and treatment of malignant tumours, haemopathy, HIV infection, immunological diseases and various inflammations. The present sequence is a PCR primer, which was used in an
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Human, natural killer cell; enhancing factor; B13.64; cytostatic;
haemostatic; virucide; immunomodulatory; antiinflammatory; gene therapy;
tumour; haemopathy; HIV infection; immunological disease; inflammation;
                                                                                              Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      The present invention relates to human natural killer cell enhancing
                                                                                                                                                                                                                                                                                                                                                                                                                                         Human natural killer cell enhancing factor B13.64 PCR primer #1.
                                                                                              ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Score 20.4; DB 1; Length 24;
Pred. No. 1.4e+02;
0; Mismatches 1; Indels
                                         0.4%; Score 21; DB 1; Length 24; 91.3%; Pred. No. 1.2e+02; tive 0; Mismatches 2; Indels
Sequence 24 BP; 20 A; 0 C; 1 G; 1 T; 0 U; 2 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Sequence 24 BP; 2 A; 11 C; 8 G; 3 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          (SHAN-) SHANGHAI BIOWINDOW GENE DEV INC.
                                                                                                                                       5022 TGTAAAAAAAAAAAAAAAAA 5044
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              5063 AACTCGAGGGGGGCCCGGTAC 5084
                                                                                                                                                                    example from the present invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Example 2; Page 18; 38pp; Chinese.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ACCTCGAGGGGGGGCCCGGTAC 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             BP
                                                                                                                                                                                                                                                                                                    ABA95469 standard; DNA; 24 BP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    0.4%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      21-MAY-2001; 2001WO-CN000855.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 24-MAY-2000; 2000CN-00115801
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           RESULT 32
ADS13095/c
ID ADS13095 standard; DNA; 22
XX
AC ADS13095;
                                                                                                                                                                                                                                                                                                                                                                                                (first entry)
                                                                   Best Local Similarity 91.3
Matches 21; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         WPI; 2002-089921/12.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             and inflammation.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          WO200190177-A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                PCR primer; ss
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Mao Y, Xie Y;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                04-APR-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        29-NOV-2001.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             21;
                                                                                                                                                                                                                                                                                                                                                  ABA95469;
                                             Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         22
```

Silman I;

ò

Gaps

ö

8

ઠે

AAF76082;

Synthetic.

Loerz H,

Novel

```
The present invention provides the protein and coding sequences of the Zea mays ZmWADS2 protein, which is specifically expressed in pollen. The sequences can be used to produce male sterile plants, as ZmWADS2 is essential for pollen tube growth. These are useful in hybrid breeding, particularly of corn, cereal and grain. The present sequence is a PCR primer for the ZmWADS2 coding sequence
    Male sterile plant; maize; hybrid breeding; pollen tube; ZmMADS2; grain; cereal; corn; PCR primer; s8.
                                                                                                                                                                                                                                                                                                                                                                                                                          Novel nucleic acid molecule, ZmMADS2 derived from pollen of Zea mays useful for cloning and expressing a pollen specific sequence in a plant and for producing male sterile plants.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Human PI3K regulatory subunit 4, p150 DNA antisense oligonucleotide #1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Human; phosphoinositide-3-kinase regulatory subunit 4; p150; P13K; p13 kinase; ss; antisense oligonucleotide; phosphorothioate linkage; 2'-O-methoxyethyl sugar moiety; 5-methoxyethyl sugar sorder; hyperproliferative disorder; cancer; Chediak-Higashi syndrome; neurodegenerative disorder; metabolic disorders; inflammation; cytostatic; immunomodulator; neurodegenerative; antimicrobial;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                0.4%; Score 20; DB 1; Length 20;
.00.0%; Pred. No. 1.4e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Sequence 20 BP; 3 A; 8 C; 6 G; 3 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Similarity 100.0%; Pred. No. 1...
                                                                                                                                                                                                                                                                                                                                               Schreiber D,
                                                                                                                                                                                                                                                                                                     (SUED-) SUEDWESTDEUTSCHE SAATZUCHT.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Example 1; Page 74; 76pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         5 CCCCCGGGCTGCAGGAATTC 24
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1 CCCCGGGCTGCAGGAATTC 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ADH26676/c
ID ADH26676 standard; DNA; 20 BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     31-MAY-2002; 2002US-00160786.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    31-MAY-2002; 2002US-00160786.
                                                                                                                                                                                                               16-AUG-2000; 2000WO-EP008001.
                                                                                                                                                                                                                                                           99EP-00116267
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       11-MAR-2004 (first entry)
                                                                                                                                                                                                                                                                                                                                                  Dresselhaus T,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              (ISIS-) ISIS PHARM INC.
                                                                                                                                                                                                                                                                                                                                                                                         WPI; 2001-211213/21.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    antiinflammatory.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        US2003225013-A1.
                                                                                                                                WO200112798-A2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Homo sapiens
                                                                                                                                                                                                                                                              18-AUG-1999;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Local Sim
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                04-DEC-2003.
                                                                                                                                                                          22-FEB-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ADH26676;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Query Match
                                                                                                                                                                                                                                                                                                                                                    Loerz H,
                                                                                        Zea mays.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             RESULT 35
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ઠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 The invention relates to regulatory elements (AAF76067) from the maize MADS box gene ZmwADS2 (AAF76068) which are capable of directing capression in a pollen-specific manner. The ZmwADS2 protein (AAB73333) is expression in a pollen-specific manner. The ZmwADS2 protein (AAB73333) is expressed particularly in mature pollen after dehiscence, indicating that it has an essential role in pollen development and function, in particular in pollen tube growth. The invention also relates to vectors particular in pollen tube growth. The invention also relates to vectors and host cells comprising the ZmwADS2 regulatory or genomic sequence, and host cells comprising the ZmwADS2 regulatory or generation of transgenic plants. The ZmwADS2 regulatory sequences are useful for cloning and expressing a pollen-specific or pollen-abundant gene in a plant, and may also be useful for isolating related comprisation of agene of interest in a pollen-specific or pollen-preferred manner. The ZmwADS2 regulatory sequences are useful for isolating related regulatory sequences of other plant species which confer pollen or group confer pollen or group conference of interest operably linked to them. The regulatory sequences are useful in plant breeding, especially for the production of hybrid seed. In particular, they may be used to drive the pollen-specific compression of heterologous genes which confer nuclear or cytoplasmic male steility in transgenic plants (e.g., cereals). Sequences AAF76081.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      nucleic acid molecule useful for cloning and expressing a pollen
                                                                                                             pBluescript vector PCR primer, SEQ ID:26, used to isolate ZmMADS2 cDNA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ö
                                                                                                                                                       Maize MADS box gene; ZmMADS2; pollen-specific expression; pollen development; function; transgenic plant; male sterility; hybrid seed production; PCR primer; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           0.4%; Score 20; DB 1; Length 20;
100.0%; Pred. No. 1.4e+02;
Live 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Maize ZmMADS2 coding sequence PCR primer SEQ ID NO: 26.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sequence 20 BP; 3 A; 8 C; 6 G; 3 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Heuer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Schreiber D,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           (SUED-) SUEDWESTDEUTSCHE SAATZUCHT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Example 1; Page 32; 66pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      5 CCCCCGGGCTGCAGGAATTC 24
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1 CCCCGGGCTGCAGGAATTC 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     specific sequence in a plant.
                                                                                                                                                                                                                                                                                                                                                                                                                                   99EP-00116268.
                                                                                                                                                                                                                                                                                                                                                                                     16-AUG-2000; 2000WO-EP008002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AAF76469 standard; DNA; 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Query Match
Best Local Similarity 100.0
watches 20, Conservative
                                                                            22-MAY-2001 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Dresselhaus T,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 WPI; 2001-211214/21.
                                                                                                                                                                                                                                                                                                     WO200112799-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         11-MAY-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                   18-AUG-1999;
                                                                                                                                                                                                                                                                                                                                             22-FEB-2001
```

AAF76469;

XXXXXX

RESULT 34 AAF76469

ð 셤

ö

Gaps

ö

Indels

ŝ Heuer

```
The invention relates to a compound targeted to a nucleic acid molecule encoding human phosphoinositide-3-kinase (PI3K) regulatory subunit 4, p150. The compound is an antisense oligonucleotide that specifically hybridises with a nucleic acid molecule encoding PI3K regulatory subunit 4, p150 and inhibits expression of the polypeptide. The antisense oligonucleotide comprises at least one modified internucleoside linkage i.e. a phosphorothioate linkage, at least one modified sugar modiety, preferably a 2'-0-methoxyethyl sugar moiety, or at least one modified sugar modiety, preferably a 2'-0-methoxyethyl sugar moiety, or at least compounds are useful for modulating the expression of PI3K regulatory subunit 4, p150 and for preventing or treating hyperproliferative disorders and cancer), Chediak-Higashi syndrome, neurodegenerative disorders and metabolic disorders. These may also be used in research and diagnostics and in preventing or delaying infection or inflammation. This sequence represents an antisense oligonucleotide of the invention.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Human PI3K regulatory subunit 4, p150 DNA antisense oligonucleotide #34.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Human; phosphoinositide-3-kinase regulatory subunit 4; p150; P13K; P13 kinase; ss; antisense oligonucleotide; phosphorothioate linkage; 2'-O-methoxyethyl sugar moiety; 5-methylcytosine; hyperproliferative disorder; cancer; Chediak-Higashi syndrome; neurodegenerative disorder; metabolic disorders; inflammation;
                                                                                       New antisense oligonucleotides inhibiting the expression of phosphoinositide-3-kinase, regulatory subunit 4, p150, useful for preventing or treating diseases associated with the subunit, e.g.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         cytostatic; immunomodulator; neurodegenerative; antimicrobial;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Score 20; DB 1; Length 20;
Pred. No. 1.4e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Sequence 20 BP; 5 A; 8 C; 5 G; 2 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Mismatches
                                                                                                                                                                                 Example 15; SEQ ID NO 11; 62pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CGTTTGCTGGGGCTGCAGCA 62
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Query Match
Best Local Similarity 100.0%; Pr
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CGTTTGCTGGGGCTGCAGCA 1
                                                                                                                              preventing or treating diseas hyperproliferative disorders.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           31-MAY-2002; 2002US-00160786.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                31-MAY-2002; 2002US-00160786.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           .709/c
ADH26709 standard; DNA; 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     (ISIS-) ISIS PHARM INC
                 Dobie KW;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Dobie KW;
                                                    WPI; 2004-051923/05.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 WPI; 2004-051923/05.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          antiinflammatory.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    US2003225013-A1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   11-MAR-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Homo варіепв
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          04-DEC-2003.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Freier SM,
                 Freier SM,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ADH26709;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            43
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           g
```

Gaps

;

```
The invention relates to a compound targeted to a nucleic acid molecule encoding human phosphoinositide-3-kinase (PI3K) regulatory subunit 4, p150. The compound is an antisense oligonucleotide that specifically hybridises with a nucleic acid molecule encoding PI3K regulatory subunit 4, p150 and inhibits expression of the polypeptide. The antisense coligonucleotide comprises at least one modified internucleoside linkage i.e. a phosphorothioate linkage, at least one modified sugar molety, preferably a 2'-0-methoxyethyl sugar molety, or at least one modified nucleobase comprising a 5-methylcytosine. The antisense compounds are useful for modulating the expression of PI3K regulatory subunit 4, p150 and for preventing or treating byperproliferative disorders and cancer), Chediak-Higashi syndrome, neurodegenerative disorders and metabolic disorders. These may also be used in research and diagnostics and in preventing or delaying infection or inflammation. This sequence represents an antisense oligonucleotide of the invention.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Human PI3K regulatory subunit 4, p150 DNA antisense oligonucleotide #51.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Gape
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Human; phosphoinositide-3-kinase regulatory subunit 4; p150; P13K; P13 kinase; ss; antisense oligonucleotide; phosphorothioate linkage; 2'-O-methoxyethyl sugar moiety; 5-methylcytosine; hyperproliferative disorder; cancer; Chedlak-Higashi syndrome; neurodegenerative disorder; metabolic disorders; inflammation; cytostatic; immunomodulator; neurodegenerative; antimicrobial;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              New antieense oligonucleotides inhibiting the expression of phosphoinositide-3-kinase, regulatory subunit 4, p150, useful for preventing or treating diseases associated with the subunit, e.g. hyperproliferative disorders.
                for
            phosphoinositide-3-kinase, regulatory subunit 4, p150, useful for preventing or treating diseases associated with the subunit, e.g. hyperproliferative disorders.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ö
New antisense oligonucleotides inhibiting the expression of
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               0.4%; Score 20; DB 1; Length 20;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                Sequence 20 BP; 5 A; 5 C; 5 G; 5 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1.46+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         100.0%; Pred. No. 1.4
                                                                                                Example 15; SEQ ID NO 44; 62pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     2041 ACAGCTCTGAGATTCCTGGA 2060
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              20 ACAGCTCTGAGATTCCTGGA 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ADH26726/c
ID ADH26726 standard; DNA; 20 BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               31-MAY-2002; 2002US-00160786
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       31-MAY-2002; 2002US-00160786
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               11-MAR-2004 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Local Similarity 100.
Les 20, Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               (ISIS-) ISIS PHARM INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Freier SM, Dobie KW;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        WPI; 2004-051923/05.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    antiinflammatory.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                US2003225013-A1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       04-DEC-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ADH26726;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          RESULT 37
ઠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           음
```

 $\overset{\otimes}{\times} \overset{\times}{\times} \overset{\times}$ 

```
용
222222222222223
                                                                                                                                                                                                                                                                                                                                                                  ò
                                The invention relates to a compound targeted to a nucleic acid molecule encoding human phosphoinositide-3-kinase (PI3K) regulatory subunit 4, p150. The compound is an antisense oligonucleotide that specifically thybridises with a nucleic acid molecule encoding PI3K regulatory subunit 4, p150 and inhibits expression of the polypeptide. The antisense oligonucleotide comprises at least one modified internucleoside linkage i.e. a phosphorothioate linkage, at least one modified sugar moiety, preferably a 2'-0-methoxyethyl sugar moiety, or at least one modified nucleobase comprising a 5-methyloytosine. The antisense compounds are nucleobase comprising the expression of PI3K regulatory subunit 4, p150 and for preventing or treating hyperproliferative disorders (i.e. and for preventing or treating hyperproliferative disorders (i.e. and in preventing or delaying infection or inflammation. This sequence and in preventing or delaying infection or inflammation. This sequence
                                                                                                                                                                                                                                                                                                                                                                                                                           ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Human P13K regulatory subunit 4, p150 DNA antisense oligonucleotide #58.
                                                                                                                                                                                                                                                                                                                                                                                                                             Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Human; phosphoinositide-3-kinase regulatory subunit 4; p150; P13K; p13 kinase; ss; antisense oligomucleotide; phosphorothioate linkage; 2'-0-methoxyethyl sugar moiety; 5-methoxyethyl sugar moiety; 5-methoxyethyl sugar moiety; cancer; Chediak-Higashi syndrome; hyperproliferative disorder; cancer; Chediak-Higashi syndrome; ceurodegenerative disorder; metabolic disorders; inflammation; cytostatic; immunomodulator; neurodegenerative; antimicrobial;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   New antisense oligonucleotides inhibiting the expression of phosphoinositide-3-kinase, regulatory subunit 4, p150, useful for preventing or treating diseases associated with the subunit, e.g.
                                                                                                                                                                                                                                                                                                                                                                                                                               ö
                                                                                                                                                                                                                                                                                                                                                                                       0.4%; Score 20; DB 1; Length 20; 100.0%; Pred. No. 1.4e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                           0; Indels
                                                                                                                                                                                                                                                                                                                                                  Sequence 20 BP; 4 A; 2 C; 5 G; 9 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                 0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Example 15; SEQ ID NO 68; 62pp; English.
      Example 15; SEQ ID NO 61; 62pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     3388 AAAACTGAACTTCAGCAACT 3407
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           20 AAAACTGAACTTCAGCAACT 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 hyperproliferative disorders.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ADH26733 standard; DNA; 20 BP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    31-MAY-2002; 2002US-00160786.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      31-MAY-2002; 2002US-00160786.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                   20; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          (ISIS-) ISIS PHARM INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Dobie KW;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       WPI; 2004-051923/05.
                                                                                                                                                                                                                                                                                                                                                                                                                 Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                antiinflammatory
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         US2003225013-A1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     11-MAR-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               04-DEC-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Freier SM,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ADH26733;
                                                                                                                                                                                                                                                                                                                                                                                               Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                       Best Loca
Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        RESULT 38
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ADH26733/
```

à 셤 The invention relates to a compound targeted to a nucleic acid molecule encoding human phosphoinositide-3-kinase (PI3K) regulatory subunit 4, p150. The compound is an antisense oligonucleotide that specifically

```
ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 The invention relates to a compound targeted to a nucleic acid molecule encoding human phosphoinositide-3-kinase (PI3K) regulatory subunit 4, p150. The compound is an antisense oligonuclectide that specifically hybridises with a nucleic acid molecule encoding PI3K regulatory subunit 4, p150 and inhibits expression of the polypeptide. The antisense oligonuclectide comprises at least one modified internucleoside linkage i.e. a phosphorothioate linkage, at least one modified sugar moiety, preferably a 2'-0-methoxyethyl sugar moiety, or at least one modified
hybridises with a nucleic acid molecule encoding PIJK regulatory subunit 4, p150 and inhibits expression of the polypeptide. The antisense oligomucleotide comprises at least one modified internucleoside linkage i.e. a phosphorothioate linkage, at least one modified sugar moiety, preferably a 2'-O-methoxyethyl sugar moiety, or at least one modified nucleobase comprising a 5-methylcytosine. The antisense compounds are nucleobase comprising a 5-methylcytosine. The antisense compounds are and for preventing or treating hyperproliferative disorders (i.e. cancer), Chediak-Higashi syndrome, neurodegenerative disorders and metabolic disorders and alaquostics and in preventing or delaying infection or inflammation. This sequence represents an antisense oligonucleotide of the invention.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Human PI3K regulatory subunit 4, p150 DNA antisense oligonucleotide #64.
                                                                                                                                                                                                                                                                                                                                                                                      Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Human; phosphoinositide-3-kinase regulatory subunit 4; p150; P13K; P13 kinase; ss; antisense oligonucleotide; phosphorothioate linkage; 2'-O-methoxyethyl sugar moiety; 5-methoxyethyl sugar solider; cancer; Chediak-Higashi syndrome; hyperproliferative disorder; cancer; Chediak-Higashi syndrome; neurodegenerative disorder; metabolic disorders; inflammation; cytostatic; immunomodulator; neurodegenerative; antimicrobial;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 New antisense oligonucleotides inhibiting the expression of phosphoinositide-3-kinase, regulatory subunit 4, p150, useful for preventing or treating diseases associated with the subunit, e.g.
                                                                                                                                                                                                                                                                                                                                                                                      ö
                                                                                                                                                                                                                                                                                                                                          DB 1; Length 20;
1.4e+02;
                                                                                                                                                                                                                                                                                                                                                                                      0; Indels
                                                                                                                                                                                                                                                                                                Sequence 20 BP; 8 A; 5 C; 4 G; 3 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                           0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Example 15; SEQ ID NO 74; 62pp; English.
                                                                                                                                                                                                                                                                                                                                                 Score 20;
Pred. No.
                                                                                                                                                                                                                                                                                                                                                                                                                                       3762 TGTCCAGCTTCTTGGAATTG 3781
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            20 rerccaecricinedaarid 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              hyperproliferative disorders.
                                                                                                                                                                                                                                                                                                                                                   0.4%; S
100.0%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ADH26739 standard; DNA; 20 BP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    31-MAY-2002; 2002US-00160786.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                31-MAY-2002; 2002US-00160786.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  11-MAR-2004 (first entry)
                                                                                                                                                                                                                                                                                                                                                                        Local Similarity 100.
Les 20; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             (ISIS-) ISIS PHARM INC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Dobie KW;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              WPI; 2004-051923/05.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             antiinflammatory
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   US2003225013-A1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               04-DEC-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Freier SM,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ADH26739;
                                                                                                                                                                                                                                                                                                                                                      Query Match
                                                                                                                                                                                                                                                                                                                                                                                               Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         RESULT 39
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ADH26739/
```

```
ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    The invention relates to a compound targeted to a nucleic acid molecule encoding human phosphoinositide-3-kinase (PI3K) regulatory subunit 4, p150. The compound is an antisense oligonucleotide that specifically hybridises with a nucleic acid molecule encoding PI3K regulatory subunit 4, p150 and inhibits expression of the polypeptide. The antisense oligonucleotide comprises at least one modified internucleoside linkage i.e a phosphorothioate linkage, at least one modified internucleoside linkage i.e a phosphorothioate linkage, at least one modified super moiety, preferably a 2'-0-methoxyethy! sugar moiety, or at least one modified nucleobase comprising a 5-methylcytosine. The antisense compounds are useful for modulating the expression of P13K regulatory subunit 4, p150 and for preventing or treating hyperproliferative disorders (i.e. cancer), Chediak-Higashi syndrome, neurodegenerative disorders and metabolic disorders. These may also be used in research and diagnostics
nucleobase comprising a 5-methylcytosine. The antisense compounds are useful for modulating the expression of PINK regulatory subunit 4, p150 and for preventing or treating hyperproliferative disorders (i.e. cancer), Chediak-Higashi syndrome, neurodegenerative disorders and metabolic disorders. These may also be used in research and diagnostics and in preventing or delaying infection or inflammation. This sequence represents an antisense oligonucleotide of the invention.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Human PI3K regulatory subunit 4, p150 DNA antisense oligonucleotide #74
                                                                                                                                                                                                                                                             Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Human; phosphoinositide-3-kinase regulatory subunit 4; p150; P13K; P13 kinase; ss; antisense oligonucleotide; phosphorothioate linkage; 2'-O-methoxyethyl sugar molety; 5-methylcytosine; hyperproliferative disorder; cancer; Chediak-Higashi syndrome; neurodegenerative disorder; metabolic disorders; inflammation; cytostatic; immunomodulator; neurodegenerative; antimicrobial;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  New antisense oligonucleotides inhibiting the expression of phosphoinositide-3-kinase, regulatory subunit 4, p150, useful for preventing or treating diseases associated with the subunit, e.g. hyperproliferative disorders.
                                                                                                                                                                                                                                                             ö
                                                                                                                                                                                                              0.4%; Score 20; DB 1; Length 20; 100.0%; Pred. No. 1.4e+02; ive 0; Mismatches 0; Indels
                                                                                                                                                                        Sequence 20 BP; 7 A; 6 C; 4 G; 3 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Example 15; SEQ ID NO 84; 62pp; English.
                                                                                                                                                                                                                                                                                                       4050 CAGTGGTACCATGGCTTGTT 4069
                                                                                                                                                                                                                                                                                                                                             cagregraccareecrrerr 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                       ADH26749 standard; DNA; 20 BP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      31-MAY-2002; 2002US-00160786
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 31-MAY-2002; 2002US-00160786
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            (first entry)
                                                                                                                                                                                                         Query Match
Best Local Similarity 100.
Matches 20, Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           (ISIS-) ISIS PHARM INC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Freier SM, Dobie KW;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              WPI; 2004-051923/05.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   antiinflammatory
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   US2003225013-A1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              11-MAR-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            04-DEC-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ADH26749;
                                                                                                                                                                                                                                                                                                                                             20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Homo
                                                                                                                                                                                                                                                                                                                                                                                                              RESULT 40
                                                                                                                                                                                                                                                                                                                                                                                                                                  88888888888
                                                                                                                                                                                                                                                                                                                                             용
                                                                                                                                                                                                                                                                                                       ઠે
```

```
The invention relates to a compound targeted to a nucleic acid molecule encoding human phosphoinositide-3-kinase (PI3K) regulatory subunit 4, p150. The compound is an antisense oligonuclectide that specifically hybridises with a nucleic acid molecule encoding PI3K regulatory subunit 4, p150 and inhibits expression of the polypeptide. The antisense oligonuclectide comprises at least one modified internucleoside linkage i.e. a phosphorothioate linkage, at least one modified sugar molety, preferably a 2'-O-methoxyethyl sugar molety, or at least one modified nucleobase comprising a 5-methylcytosine. The antisense compounds are useful for modulating the expression of P13K regulatory subunit 4, p150 and for preventing or treating hyperproliferative disorders and metabolic disorders. These may also be used in research and diagnostics metabolic disorders. These may also be used in research and diagnostics and in preventing or delaying infection or inflammation. This sequence represents a P13K regulatory subunit 4, p150 DNA antisense
This sequence
                                                                                                                                      Gape
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Human; phosphoinositide-3-kinase regulatory subunit 4; p150; P13K; P13 kinase; ds; antisense oligonucleotide; phosphorothioate linkage; 2'-O-methoxyethyl sugar molety; 5-methylcytosine; hyperproliferative disorder; cancer; Chediak-Higashi syndrome; neurodegenerative disorder; metabolic disorders; inflammation; cytostatic; immunomodulator; neurodegenerative; antimicrobial;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               New antisense oligonucleotides inhibiting the expression of phosphoinositide-3-kinase, regulatory subunit 4, p150, useful for preventing or treating diseases associated with the subunit, e.g.
                                                                                                                                    ô
                                                                                                                                                                                                                                                                                                                                                                                                                                 Human PI3K regulatory subunit 4, p150 DNA target region #3.
  and in preventing or delaying infection or inflammation. represents an antisense oligonucleotide of the invention.
                                                                                               Length 20;
                                                                                                                                    0, Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Sequence 20 BP; 4 A; 7 C; 3 G; 6 T; 0 U; 0 Other;
                                                           Sequence 20 BP; 5 A; 4 C; 3 G; 8 T; 0 U; 0 Other;
                                                                                                                 100.0%; Pred. No. 1.4e+02; ive 0; Mismatches 0;
                                                                                               DB 1,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Example 15; SEQ ID NO 91; 62pp; English.
                                                                                                 0.4%; Score 20;
                                                                                                                                                                          4633 GTGTGGAAATAAAACCTACT 4652
                                                                                                                                                                                                 GTGTGGAAATAAAACCTACT 1
                                                                                                                                                                                                                                                                                                                 ADH26756 standard; DNA; 20 BP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          hyperproliferative disorders.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    31-MAY-2002; 2002US-00160786.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         31-MAY-2002; 2002US-00160786
                                                                                                                                                                                                                                                                                                                                                                                        11-MAR-2004 (first entry)
                                                                                                                                      Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               (ISIS-) ISIS PHARM INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Dobie KW;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             WPI; 2004-051923/05.
                                                                                         Query Match
Best Local Similarity
Matches 20; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           antiinflammatory.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       US2003225013-A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             04-DEC-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Freier SM,
                                                                                                                                                                                                                                                                                                                                                     ADH26756;
  ន្តដ្ឋនូ
                                                                                                                                                                                                                                                                                                                 ઠે
                                                                                                                                                                                                               용
```

```
The invention relates to a compound targeted to a nucleic acid molecule encoding human phosphoinositide-3-kinase (PI3K) regulatory subunit 4, p150. The compound is an antisense olisyonucleotide that specifically hybridises with a nucleic acid molecule encoding PI3K regulatory subunit 4, p150 and inhibits expression of the polypeptide. The antisense olisyonucleotide comprises at least one modified internucleoside linkage i.e. a phosphorothioate linkage, at least one modified sugar moiety, preferably a 2'-0-methoxyethyl sugar moiety, or at least one modified comprises and for preferably a 1'-0-methyloytosine. The antisense compounds are uncleobase comprising a 5-methyloytosine. The antisense compounds are uncleobase comprising the expression of PI3K regulatory subunit 4, p150 and for preventing or treating hyperproliferative disorders (i.e. and for preventing or treating hyperproliferative disorders (i.e. cancer), chedriak-Higashi syndorme, neurodegenerative disorders and and in preventing or delaying infection or inflammation. This sequence and in preventing or delaying infection or inflammation. This sequence
                                                  ô
                                                                                                                                                                                                                                                                                                                                       Human PI3K regulatory subunit 4, p150 DNA antisense oligonucleotide #3.
                                                  Gaps
                                                                                                                                                                                                                                                                                                                                                                                Human, phosphoinositide-3-kinase regulatory subunit 4, p150, P13K;
P13 kinase, 88, antisense oligonuclectide, phosphorothicate linkage;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       New antisense oligonucleotides inhibiting the expression of phosphoinositide-3-kinase, regulatory subunit 4, p150, useful for preventing or treating diseases associated with the subunit, e.g. hyperproliferative disorders.
                                                                                                                                                                                                                                                                                                                                                                                                                2'-O-methoxyethyl sugar moiety; 5-methylytosine; hyperproliferative disorder; cancer; Chediak-Higashi syndrome; neurodegenerative disorder; metabolic disorders; inflammation; cytostatic; immunomodulator; neurodegenerative; antimicrobial;
                                                  ô
              Length 20;
                                                  0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Sequence 20 BP; 6 A; 3 C; 7 G; 4 T; 0 U; 0 Other;
                                  1.4e+02;
                Score 20; DB 1;
Pred. No. 1.4e+0
0.4%; Scort
100.0%; Pred. No. 1...
0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Example 15; SEQ ID NO 13; 62pp; English.
                                                                                           377 AGCCCATCTCTGTCTATGA 396
                                                                                                             1 AGCCCATCTCCTGTCTATGA 20
                                                                                                                                                                                                                               ADH26678 standard; DNA; 20 BP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          31-MAY-2002; 2002US-00160786
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 31-MAY-2002; 2002US-00160786
                                                                                                                                                                                                                                                                                                          (first entry)
                                                      20; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       (ISIS-) ISIS PHARM INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Dobie KW;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                WPI; 2004-051923/05.
                    Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          antiinflammatory.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   US2003225013-A1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Homo sapiens.
                                                                                                                                                                                                                                                                                                            11-MAR-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       04-DEC-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Freier SM,
                                                                                                                                                                                                                                                                        ADH26678;
                                                          Matches
                                                                                                                                                                                                                                                    원
```

```
The invention relates to a compound targeted to a nucleic acid molecule encoding human phosphoinositide-3-kinase (P13K) regulatory subunit 4, encoding human phosphoinositide-3-kinase (P13K) regulatory subunit 4, p150. The compound is an antisense oligonucleotide that specifically hypotidises with a nucleic acid molecule encoding P13K regulatory subunit 6, proficial end inhibits expression of the polypeptide. The antisense oligonucleotide comprises at least one modified internucleoside linkage i.e. a phosphorothicate linkage, at least one modified sugar moiety, i.e. a phosphorothicate linkage, at least one modified sugar moiety, or at least one modified nucleobase comprising a 5-methylotrosine. The antisense compounds are useful for modulating the expression of P13K regulatory subunit 4, p150 and for preventing or treating hyperproliferative disorders and metabolic disorders. These may also be used in research and diagnostics and in preventing or dalaying infection or inflammation. This sequence
                                                                                                                                                                                                                                          Human PI3K regulatory subunit 4, pl50 DNA antisense oligonucleotide #6.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Gaps
                                                                                                                                                                                                                                                                                   Human, phosphoinositide-3-kinase regulatory subunit 4; p150; P13K; p13 kinase; ss; antisense oligonucleotide; phosphorothioate linkage; 2'-0-methoxyethyl sugar moiety; 5-methoxyethyl syndrome; hyperproliferative disorder; cancer; Chediak-Higashi syndrome; neurodegenerative disorder; metabolic disorders; inflammation; cytostatic; immunomodulator; neurodegenerative; antimicrobial;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    New antisense oligonucleotides inhibiting the expression of phosphoinositide-3-kinase, regulatory subunit 4, p150, useful for preventing or treating diseases associated with the subunit, e.g.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                represents an antisense oligonucleotide of the invention.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          0.4%; Score 20; DB 1; Length 20;
100.0%; Pred. No. 1.4e+02;
tive 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Sequence 20 BP; 3 A; 2 C; 6 G; 9 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Example 15; SEQ ID NO 16; 62pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             534 AACCTTACTAAAGACCACAG 553
377 AGCCCATCTCCTGTCTATGA 396
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  20 AACCTTACTAAAGACCACAG 1
                    20 AGCCCATCTCCTGTCTATGA 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   hyperproliferative disorders.
                                                                                                                                      BP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  31-MAY-2002; 2002US-00160786.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         31-MAY-2002; 2002US-00160786.
                                                                                                                                      ADH26681 standard; DNA; 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Query Match 0.4
Best Local Similarity 100.
Matches 20; Conservative
                                                                                                                                                                                                                  (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              (ISIS-) ISIS PHARM INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Dobie KW;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       WPI; 2004-051923/05.
                                                                                                                                                                                                                                                                                                                                                                                                              antiinflammatory
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         US2003225013-A1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                    Homo sapiens
                                                                                                                                                                                                                  11-MAR-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              04-DEC-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Freier SM,
                                                                                                                                                                               ADH26681;
                                                                                                    RESULT 43
                                                                                                                      ADH26681/
                                                                                                                                                                             à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    d
                                      원
        ò
```

; 0

ö

Gaps

.. 0

0; Indels

0.4%; Score 20; DB 1; Length 20; 00.0%; Pred. No. 1.4e+02;

0; Mismatches

100.08;

Query Match 0.49
Best Local Similarity 100.
Matches 20; Conservative

(first entry)

```
Human PI3K regulatory subunit 4, p150 DNA antisense oligonucleotide #42.
                                                                       Human; phosphoinositide-3-kinase regulatory subunit 4; p150; P13K; P13 kinase; ss; antisense oligonucleotide; phosphorothioate linkage; 2'-0-methoxyethyl sugar moiety; 5-methylcytosine; hyporyproliferative disorder; cancer; Chediak-Higash; syndrome; neurodegenerative disorder; metabolic disorders; inflammation;
                                                                                                                                                       cytostatic; immunomodulator; neurodegenerative; antimicrobial;
                                                                                                                                                                      antiinflammatory.
ઠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         The invention relates to a compound targeted to a nucleic acid molecule encoding human phosphoinositide-1-kinase (PT3K) regulatory subunit 4, p150. The compound is an antisense oligonuclectide that specifically hybridises with a nucleic acid molecule encoding PT3K regulatory subunit 6, p150 and inhibits expression of the polypeptide. The antisense coligonuclectide comprises at least one modified internucleoside linkage i.e. a phosphorothioate linkage, at least one modified sugar molety, preferably a 2'-0-methoxyethyl sugar moiety, or at least one modified in cucleobase comprising a 5-methylcytosine. The antisense compounds are useful for modulating the expression of PT3K regulatory subunit 4, p150 and for preventing or treating hyperproliferative disorders and cancer), chediak-Higashi syndrome, neurodegenerative disorders and metabolic disorders. These may also be used in research and diagnostics and in preventing or delaying infection or inflammation. This sequence represents an antisense oligonucleotide of the invention.
                                                                                                                       Human PI3K regulatory subunit 4, p150 DNA antisense oligonucleotide #26.
                                                                                                                                                   Human; phosphoinositide-3-kinase regulatory subunit 4; p150; P13K; P13 Kinase; ss; antisense oligonuclectide; phosphorothioate linkage; 2'-O-methoxyethyl sugar moiety; 5-methylcytosine; hyperproliferative disorder; cancer; Chediak-Higashi syndrome; neurodegenerative disorder; metabolic disorders; inflammation; cytostatic; immunomodulator; neurodegenerative; antimicrobial;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  New antisense oligonucleotides inhibiting the expression of phosphoinositide-3-kinase, regulatory subunit 4, p150, useful for preventing or treating diseases associated with the subunit, e.g.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    0.4%; Score 20; DB 1; Length 20;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Sequence 20 BP; 5 A; 5 C; 7 G; 3 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          100.0%; Pred. ...
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Example 15; SEQ ID NO 36; 62pp; English.
                             ADH26701 standard; DNA; 20 BP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 hyperproliferative disorders.
                                                                                                                                                                                                                                                                                                                                                                            31-MAY-2002; 2002US-00160786
                                                                                                                                                                                                                                                                                                                                                                                                         31-MAY-2002; 2002US-00160786
                                                                                        (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                        (ISIS-) ISIS PHARM INC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Dobie KW;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      WPI; 2004-051923/05.
                                                                                                                                                                                                                                                 antiinflammatory.
                                                                                                                                                                                                                                                                                                            US2003225013-A1.
                                                                                                                                                                                                                                                                               Homo sapiens
                                                                                        11-MAR-2004
                                                                                                                                                                                                                                                                                                                                           04-DEC-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Freier SM,
                                                         ADH26701;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Query Match
```

```
The invention relates to a compound targeted to a nucleic acid molecule encoding human phosphoinositide-3-kinase (PI3K) regulatory subunit 4, p150 The compound is an antisense oligonucleotide that specifically hybridises with a nucleic acid molecule encoding PI3K regulatory subunit 4, p150 and inhibits expression of the polypeptide. The antisense oligonucleotide comprises at least one modified internucleoside linkage i.e. a phosphorothioate linkage, at least one modified sugar molety, preferably 2'-0-methoxyethyl sugar molety, or at least one modified in nucleobase comprising a 5-methylcytosine. The antisense compounds are useful for modulating the expression of PI3K regulatory subunit 4, p150 and for preventing or treating hyperproliferative disorders and cancer), Chediak-Higsshi syndrome, neurodegenerative disorders and metabolic disorders. These may also be used in research and diagnostics and in preventing or delaying infection or infilammation. This sequence represents an antisense oligonucleotide of the invention.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Human PI3K regulatory subunit 4, p150 DNA antisense oligonucleotide #66.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Gape
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    New antisense oligonucleotides inhibiting the expression of bhosphoinositide-31-kinase, regulatory subunit 4, p150, useful for preventing or treating diseases associated with the subunit, e.g. hyperproliferative disorders.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          0.4%; Score 20; DB 1; Length 20; 100.0%; Pred. No. 1.4e+02; ive 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Seguence 20 BP; 6 A; 4 C; 4 G; 6 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Example 15; SEQ ID NO 52; 62pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          2731 GAACCAGTAAGTCGTTCTAT 2750
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               20 GAACCAGTAAGTCGTTCTAT 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    BP.
                                                                                                                                                                                     31-MAY-2002; 2002US-00160786.
                                                                                                                                                                                                                                                   31-MAY-2002; 2002US-00160786.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ADH26741/c
ID ADH26741 standard; DNA; 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Query Match
Best Local Similarity 100.0
Matches 20; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          11-MAR-2004 (first entry)
                                                                                                                                                                                                                                                                                                                  (ISIS-) ISIS PHARM INC.
                                                                                                                                                                                                                                                                                                                                                                                Dobie KW;
                                                                                                                                                                                                                                                                                                                                                                                                                                            WPI; 2004-051923/05.
                                                           US2003225013-A1.
Homo sapiens.
                                                                                                                      04-DEC-2003
                                                                                                                                                                                                                                                                                                                                                                                Freier SM,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ADH26741;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     RESULT 46
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               용
```

ô

Gaps

ö

0; Indels

Pred. No. 1.4e+02;

1498 CAGCGTGGCAATGCCTTTCC 1517

ઠે 셤

Local Similarity 100. 1es 20; Conservative

caecerecearecerrice 1

20

ADH26717 standard; DNA; 20 BP

RESULT 45
ADH26717/c
ID ADH26
XX
AC ADH26

ADH26717;

```
The invention relates to a compound targeted to a nucleic acid molecule encoding human phosphoinositide-3-kinase (PI3K) regulatory subunit 4, p150. The compound is an antisense oligonucleotide that specifically hybridises with a nucleic acid molecule encoding PI3K regulatory subunit 4, p150 and inhibits expression of the polypeptide. The antisense oligonucleotide comprises at least one modified internucleoside linkage i.e. a phosphorothioate linkage, at least one modified sugar moiety, preferably a 2'-0-methoxyethyl sugar moiety, or at least one modified nucleobase comprising a 5-methylcytosine. The antisense compounds are useful for modulating the expression of PI3K regulatory subunit 4, p150 and for preventing or treating hyperproliferative disorders and cancer), Chediak-Higashi syndrome, neurodegenerative disorders and may also be used in research and diagnostics and in preventing or delaying infection or inflammation. This sequence represents an antisense oligonucleotide of the invention.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Human P13K regulatory subunit 4, p150 DNA antisense oligonucleotide #73.
                              PI3 kinase; ss; antisense oligonucleotide; phosphorothicate linkage; 2'-O-methoxyethyl sugar moiety; 5-methylcytosine; hyperproliferative disorder; cancer; Chediak-Higashi syndrome; neurodegenerative disorder; metabolic disorders; inflammation; cytostatic; immunomodulator; neurodegenerative; antimicrobial; antiinflammatory.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Human, phosphoinositide-3-kinase regulatory subunit 4; p150; P13K; P13 kinase; ss; antisense oligonucleotide; phosphorothioate linkage; 2'-0-methoxyethyl sugar moiety; 5-methylcyfosine, hyperproliferative disorder; cancer; Chediak-Higashi syndrome; neurodegenerative disorder; metabolic disorders; inflammation;
Human; phosphoinositide-3-kinase regulatory subunit 4; p150; PI3K;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            New antisense oligonucleotides inhibiting the expression of phosphoinostide-3-kinase, regulatory subunit 4, p150, useful for preventing or treating diseases associated with the subunit, e.g. hyperproliferative disorders.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           .
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               0.4%; Score 20; DB 1; Length 20; 00.0%; Pred. No. 1.4e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Sequence 20 BP; 3 A; 8 C; 2 G; 7 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              100.0%; Pred. w.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Example 15; SEQ ID NO 76; 62pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   4212 GGAGACTGGTGACAGAGAT 4231
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    20 GGAGACTGGTGACAGAT 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           BP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              31-MAY-2002; 2002US-00160786.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   31-MAY-2002; 2002US-00160786.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        748/c
ADH26748 standard; DNA; 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Query Match 0.4
Best Local Similarity 100.
Matches 20; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           (ISIS-) ISIS PHARM INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Freier SM, Dobie KW;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    WPI; 2004-051923/05.
                                                                                                                                                                                                                                                                                                                                                                 US2003225013-A1
                                                                                                                                                                                                                                                                                             Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                      04-DEC-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    11-MAR-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ADH26748;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  RESULT 47
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ADH26748,
ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       MAKAKAKAKAKA
MAKAKAKA
MAKAKA
M
```

```
The invention relates to a compound targeted to a nucleic acid molecule encoding human phosphoinositide-3-kinase (PI3K) regulatory subunit 4, p150. The compound is an antisense oligonuclectide that specifically hybridises with a nucleic acid molecule encoding PI3K regulatory subunit 4, p150 and inhibits expression of the polypeptide. The antisense oligonuclectide comprises at least one modified internucleoside linkage i.e. a phosphorothioart linkage, at least one modified sugar moiety, preferably a 2'-O-methoxyethyl sugar moiety, or at least one modified nucleobase comprising a 5-methylcytosine. The antisense compounds are useful for modulating the expression of PI3K regulatory subunit 4, p150 and for preventing or treating hyperproliferative disorders (i.e. cancer). Chediak Higashi syndrome, neurodegenerative disorders and metabolic disorders. These may also be used in research and diagnostics and in preventing or delaying infection or inflammation. This sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Human PI3K regulatory subunit 4, p150 DNA antisense oligonucleotide #77.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Human; phosphoinositide-3-kinase regulatory subunit 4; p150; P13K; P13 kinase; ss; antisense oligonucleotide; phosphorothioate linkage; 2'-0-methoxyethyl sugar moiety; 5-methylcytosine; hyperproliferative disorder; cancer; Chediak-Higashi syndrome; neurodegenerative disorder; metabolic disorders; inflammation; cytostatic; immunomodulator; neurodegenerative; antimicrobial;
                                                                                                                                                                                                                                                                                                                                                                                    New antisense oligonucleotides inhibiting the expression of phosphoinositide-3 kinase, regulatory subunit 4, p150, useful for preventing or treating diseases associated with the subunit, e.g. hyperproliferative disorders.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ö
cytostatic; immunomodulator; neurodegenerative; antimicrobial;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  0.4%; Score 20; DB 1; Length 20; 00.0%; Pred. No. 1.4e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     represents an antisense oligonucleotide of the invention.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Sequence 20 BP; 6 A; 5 C; 3 G; 6 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Query Match 0.4%; Score 20; DB Best Local Similarity 100.0%; Pred. No. 1.4 Matches 20; Conservative 0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Example 15; SEQ ID NO 83; 62pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 4461 TGAAGTTGTCCAGGAAATTC 4480
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TGAAGTTGTCCAGGAAATTC 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ADH26752 standard; DNA; 20 BP
                                                                                                                                                                                31-MAY-2002; 2002US-00160786.
                                                                                                                                                                                                                         31-MAY-2002; 2002US-00160786.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            11-MAR-2004 (first entry)
                                                                                                                                                                                                                                                               (ISIS-) ISIS PHARM INC.
                                                                                                                                                                                                                                                                                                       Dobie KW;
                                                                                                                                                                                                                                                                                                                                            WPI; 2004-051923/05.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  antiinflammatory.
                 antiinflammatory
                                                                                                 US2003225013-A1
                                                           Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Homo sapiens
                                                                                                                                          04-DEC-2003
                                                                                                                                                                                                                                                                                                       Freier SM,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ADH26752;
g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ò
```

```
The invention relates to a compound targeted to a nucleic acid molecule encoding human phosphoinositide-3-kinase (PI3K) regulatory subunit 4, p150. The compound is an antisense oligonuclectide that specifically hybridises with a nucleic acid molecule encoding PI3K regulatory subunit 4, p150 and inhibits expression of the polypeptide. The antisense oligonuclectide comprises at least one modified internucleoside linkage oligonuclectide comprises at least one modified sugar moiety, preferably a 2'-O-methoxyethyl sugar moiety, or at least one modified nucleobase comprising a 5-methylcytosine. The antisense compounds are useful for modulating the expression of PI3K regulatory subunit 4, p150 and for preventing or treating hyperproliferative disorders and cancer), Chediak-Higashi syndrome, neurodegenerative disorders and metabolic disorders. These may also be used in research and diagnostics and in preventing or delaying infection or inflammation. This sequence represents a PI3K regulatory subunit 4, p150 DNA antisense
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Human; phosphoinositide-3-kinase regulatory subunit 4; p150; P118k; P13 kinase; ds; antisense oligonucleotide; phosphorothioate linkage; 2'-O-methoxyethyl sugar moiety; 5-methylcytosine; hyperproliferative disorder; cancer; Chediak-Higashi syndrome; neurodegenerative disorder; metabolic disorder; inflammation; cytostatic; immunomodulator; neurodegenerative; antimicrobial;
                                                                                                                                                                                                                                    New antisense oligonucleotides inhibiting the expression of phosphoinositide-3-kinase, regulatory subunit 4, p150, useful for preventing or treating diseases associated with the subunit, e.g. hyperproliferative disorders.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Human PI3K regulatory subunit 4, p150 DNA target region #11.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      0.4%; Score 20; DB 1; Length 20; 100.0%; Pred. No. 1.4e+02; ative 0; Mismatches 0; Indel8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Sequence 20 BP; 2 A; 5 C; 8 G; 5 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   oligonucleotide target region of the invention.
                                                                                                                                                                                                                                                                                                                                                                               Example 15; SEQ ID NO 89; 62pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    43 CGTTTGCTGGGGCTGCAGCA 62
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1, CGTTTGCTGGGGCTGCAGCA 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ADH26764 standard; DNA; 20 BP
                            31-MAY-2002; 2002US-00160786
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     31-MAY-2002; 2002US-00160786.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        31-MAY-2002; 2002US-00160786.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Query Match
Best Local Similarity 100.
                                                                               (ISIS-) ISIS PHARM INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              (ISIS-) ISIS PHARM INC.
                                                                                                                                    Freier SM, Dobie KW,
                                                                                                                                                                                       WPI; 2004-051923/05.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    antiinflammatory.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          US2003225013-A1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        11-MAR-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                04-DEC-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ADH26764;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      RESULT 50
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ADH26764
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ઠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              The invention relates to a compound targeted to a nucleic acid molecule encoding human phosphoinosttide-1-kinase (PT3K) regulatory subunit 4, p150. The compound is an antisense oligonuclectide that specifically hybridises with a nucleic acid molecule encoding PI3K regulatory subunit 6, p150 and inhibits expression of the polypeptide. The antisense comparises at least one modified internucleoside linkage i.e. a phosphorothioate linkage, at least one modified sugar moiety, preferably a 2'-0-methoxyethyl sugar moiety, or at least one modified nucleothioate linkage at least one modified sugar moiety, preferably a 2'-0-methoxyethyl sugar moiety, or at least one modified nucleothio comprising a 5-methyloytosine. The antisense compounds are useful for modulating the expression of PI3K regulatory subunit 4, p150 and for preventing or treating hyperproliferative disorders (i.e. cancer), Chediak-Higashi syndrome, neurodegenerative disorders and etabolic disorders. These may also be used in research and diagnostics and in preventing or delaying infection or inflammation. This sequence represents an antisense oligonucleotide of the invention.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Human; phosphoinositide-3-kinase regulatory subunit 4; p150; p13K; p13 kinase; ds; antisense oligonucleotide; phosphorothioate linkage; 2'-O-methoxyethyl sugar moiety; 5-methylcytosine; hyperproliferative disorder; cancer; Chediak-Higashi syndrome; neurodegenerative disorder; metabolic disorders; inflammation; cytostatic; immunomodulator; neurodegenerative; antimicrobial;
                                                                                                                                                                                                                                                                                                                                                                         New antisense oligonucleotides inhibiting the expression of phosphoinositide-3-kinase, regulatory subunit 4, p150, useful for preventing or treating diseases associated with the subunit, e.g.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Human PI3K regulatory subunit 4, p150 DNA target region #1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               0.4%; Score 20; DB 1; Length 20; 100.0%; Pred. No. 1.4e+02; ive 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Sequence 20 BP; 6 A; 4 C; 2 G; 8 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Example 15; SEQ ID NO 87; 62pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             4792 CAAAATGGTTAAGATGTACT 4811
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                20 CAAAATGGTTAAGATGTACT 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                           hyperproliferative disorders.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ADH26754 standard; DNA; 20 BP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              31-MAY-2002; 2002US-00160786.
                                                                                                        31-MAY-2002; 2002US-00160786
                                                                                                                                                           31-MAY-2002; 2002US-00160786
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   11-MAR-2004 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Best Local Similarity 100.
Matches 20; Conservative
                                                                                                                                                                                                                 (ISIS-) ISIS PHARM INC
                                                                                                                                                                                                                                                                      Freier SM, Dobie KW;
                                                                                                                                                                                                                                                                                                                         WPI; 2004-051923/05.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             antiinflammatory.
US2003225013-A1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     US2003225013-A1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Homo sapiens
                                                  04-DEC-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           04-DEC-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ADH26754;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Query Match
```

RESULT 49 ADH26754

ઠ

ô

Gape

```
ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           셤
                                                                                                                                                                                             concoding human phosphoinositide—3 kinase (Pi3K) regulatory subunit 4, pl50. The compound is an antisense oligonucleotide that specifically pl50. The compound is an antisense oligonucleotide that specifically hybridises with a mucleic acid molecule encoding Pi3K regulatory subunit 4, pl50 and inhibits expression of the polypeptide. The antisense oligonucleotide comprises at least one modified internucleoside linkage i.e. a phosphorothibate linkage, at least one modified sugar molety, preferably a 2'-0-methoxyethyl sugar molety, or at least one modified nucleobase comprising the expression of F13K regulatory subunit 4, pl50 nucleobase comprising the expression of F13K regulatory subunit 4, pl50 cancer). Chediak-Higashi syndrome, neurodegenerative disorders and metabolic disorders. These may also be used in research and diagnostics and in preventing or delaying infection or inflammation. This sequence represents a P13K regulatory subunit 4, pl50 DNA antisense
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ö
                                                                                                                                                                                   The invention relates to a compound targeted to a nucleic acid molecule
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Human; phosphoinositide-3-kinase regulatory subunit 4; p150; PI3K; PI3 kinase; ds; antisense oligonucleotide; phosphorothioate linkage; 2'-0-methoxyethyl sugar moietry; 5-methoxyetosine; hyperproliferative disorder; cancer; Chediak-Higashi syndrome; neurodegenerative disorder; metabolic disorders; inflammation;
                                                                   New antisense oligonucleotides inhibiting the expression of phosphoinositide-3-kinase, regulatory subunit 4, p150, useful for preventing or treating diseases associated with the subunit, e.g. hyperproliferative disorders.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    cytostatic; immunomodulator; neurodegenerative; antimicrobial;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Human PI3K regulatory subunit 4, p150 DNA target region #22.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Score 20; DB 1; Length 20;
Pred. No. 1.4e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                  Sequence 20 BP; 5 A; 7 C; 2 G; 6 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   100.0%; Pred. No.
                                                                                                                                                     Example 15; SEQ ID NO 99; 62pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           914 CCCGTCCATTCTTGAATAAC 933
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1 CCCGTCCATTCTTGAATAAC 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ADH26775 standard; DNA; 20 BP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           31-MAY-2002; 2002US-00160786.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         31-MAY-2002; 2002US-00160786.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Query Match
Best Local Similarity 100.
Matches 20; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      (ISIS-) ISIS PHARM INC
              Freier SM, Dobie KW;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Freier SM, Dobie KW;
                                           WPI; 2004-051923/05.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 WPI; 2004-051923/05.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    antiinflammatory.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 US2003225013-A1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               11-MAR-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              04-DEC-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ADH26775;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        RESULT 51
8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       吕
```

```
The invention relates to a compound targeted to a nucleic acid molecule encoding human phosphoinositide-3-kinase (PI3K) regulatory subunit 4, p150 17 The compound is an antisense oligonucleotide that specifically hybridises with a nucleic acid molecule encoding PI3K regulatory subunit 4, p150 and inhibits expression of the polypeptide. The antisense oligonucleotide comprises at least one modified internucleoside linkage i.e. a phosphorothioate linkage, at least one modified sugar moiety, preferably a 2'-O-methoxyethyl sugar moiety, or at least one modified custom custom in a phosphorothioate linkage, at least one modified sugar moiety, preferably a 2'-O-methoxyethyl sugar moiety, or at least one modified useful for modulating the expression of F13K regulatory subunit 4, p150 and for preventing or treating hyperproliferative disorders and cancer), Checiak-Higashi syndrome, neurodegenerative disorders and metabolic disorders. These may also be used in research and diagnostics and in preventing or delaying infection or infilammation. This sequence represents a P13K regulatory subunit 4, p150 DNA antisense
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Human; phosphoinositide-3-kinase regulatory subunit 4; p150; P13K; P13 kinase; ds; antisense oligonucleotide; phosphorothioate linkage; 2'-O-methoxyethyl sugar moiety; 5-methyloyrosine; hyperproliferative disorder; cancer; Chediak-Higashi syndrome; neurodegenerative disorder; metabolic disorder; inflammation; cytostatic; immunomodulator; neurodegenerative; antimicrobial;
New antisense oligonucleotides inhibiting the expression of phosphoinositide-3-kinase, regulatory subunit 4, p150, useful for preventing or treating diseases associated with the subunit, e.g. hyperproliferative disorders.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    New antisense oligonucleotides inhibiting the expression of phosphoinositide-3-kinase, regulatory subunit 4, p150, useful for preventing or treating diseases associated with the subunit, e.g.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Human PI3K regulatory subunit 4, p150 DNA target region #44.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Length 20;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Sequence 20 BP; 5 A; 6 C; 2 G; 7 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         0.4%; Score 20; DB 1; L
[00.0%; Pred. No. 1.4e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      represents a PI3K regulatory subunit 4, p150 DN oligonucleotide target region of the invention.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            0; Mismatches
                                                                                                                                      Example 15; SEQ ID NO 110; 62pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1706 CTGTTATAACATCCTGCCTA 1725
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1 cretraraacarccrecta 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ВР
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  100.0%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      31-MAY-2002; 2002US-00160786.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           31-MAY-2002; 2002US-00160786
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ADH26797 standard; DNA; 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 11-MAR-2004 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Query Match
Best Local Similarity 100.
Matches 20; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           (ISIS-) ISIS PHARM INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Dobie KW;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  WPI; 2004-051923/05.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       antiinflammatory.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            US2003225013-A1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    04-DEC-2003.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Freier SM,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ADH26797;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       RESULT 52
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ADH26797
```

```
셤
                                                                                                                                                                                                                                                                                                                                                              ઠ
                                                      The invention relates to a compound targeted to a nucleic acid molecule encoding human phosphoinostide-3-kinase (P13K) regulatory subunit 4, p150. The compound is an antisense oligonucleotide that specifically hybridises with a nucleic acid molecule encoding P13K regulatory subunit 4, p150 and inhibits expression of the polypeptide. The antisense oligonucleotide comprises at least one modified internucleoside linkage i.e. a phosphorothioate linkage, at least one modified sugar moiety, preferably a 2'-O-methoxyethyl sugar moiety, or at least one modified nucleobase comprising the expression of F13K regulatory subunit 4, p150 and for preventing or treating hyperproliferative disorders and and for preventing or treating hyperproliferative disorders and mod in preventing or delaying infection or inflammation. This sequence represents a P13K regulatory subunit 4, p150 DNA antisense cities represents a P13K regulatory subunit 4, p150 DNA antisense
                                                                                                                                                                                                                                                                                                                                                                                           ö
                                                                                                                                                                                                                                                                                                                                                                                           Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Human; phosphoinositide-3-kinase regulatory subunit 4; p150; p11K; P13 kinase; ds; antisense oligonucleotide; phosphorothioate linkage; 2'-O-methoxyethyl sugar moiety; 5-methylcytosine; hyperproliferative disorder; cancer; Chediak-Higashi syndrome; neurodegenerative disorder; metabolic disorders; inflammation; cytostatic; immunomodulator; neurodegenerative; antimicrobial; antiinflammatory.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     New antisense oligonucleotides inhibiting the expression of phosphoinositide-3-kinase, regulatory subunit 4, pl50, useful for preventing or treating diseases associated with the subunit, e.g. hyperproliferative disorders.
                                                                                                                                                                                                                                                                                                                                                                                           °
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Human PI3K regulatory subunit 4, p150 DNA target region #58.
                                                                                                                                                                                                                                                                                                                                                           0.4%; Score 20; DB 1; Length 20;
                                                                                                                                                                                                                                                                                                                                                                                          0; Indels
                                                                                                                                                                                                                                                                                                                            Sequence 20 BP; 4 A; 4 C; 7 G; 5 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                             Pred. No. 1.4e+02;
                                                                                                                                                                                                                                                                                                                                                                   100.0%; Pred. ...
                              Example 15; SEQ ID NO 132; 62pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Example 15; SEQ ID NO 146; 62pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                         3504 GCGTCCTAAAGGGCTGTTAG 3523
                                                                                                                                                                                                                                                                                                                                                                                                                                               GCGTCCTAAAGGCTGTTAG 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ADH26811 standard; DNA; 20 BP
hyperproliferative disorders.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             31-MAY-2002; 2002US-00160786.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            31-MAY-2002; 2002US-00160786.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             11-MAR-2004 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                          20; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           (ISIS-) ISIS PHARM INC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Freier SM, Dobie KW;
                                                                                                                                                                                                                                                                                                                                                                          Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          WPI; 2004-051923/05.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   US2003225013-A1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                04-DEC-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ADH26811;
                                                                                                                                                                                                                                                                                                                                                             Query Match
                                                                                                                                                                                                                                                                                                                                                                                           Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ADH2681.
ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                    셤
```

```
The invention relates to a compound targeted to a nucleic acid molecule encoding human phosphoinositide-3-kinase (PI3K) regulatory subunit 4, p150. The compound is an antisense oligonuclectide that specifically hybridises with a nucleic acid molecule encoding PI3K regulatory subunit 4, p150 and inhibits expression of the polypeptide. The antisense oligonuclectide comprises at least one modified internucleoside linkage i.e. a phosphorothioate linkage, at least one modified sugar molety, preferably 2'-0-methoxyethyl sugar molety, or at least one modified sugar motety, nucleobase comprising a 5-methylcytosine. The antisense compounds are useful for modulating the expression of PI3K regulatory subunit 4, p150 and for preventing or treating hyperpoliferative disorders and cancer), Chediak-Higashi syndrome, neurodegenerative disorders and metabolic disorders. These may also be used in research and diagnostics and in preventing or delaying infection or inflammation. This sequence represents a PI3K regulatory subunit 4, p150 DNA antisense
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      The invention relates to a compound targeted to a nucleic acid molecule encoding human phosphoinostide-3-kinase (PT3K) regulatory subunit 4, p150. The compound is an antisense oligonucleotide that specifically hybridises with a nucleic acid molecule encoding PI3K regulatory subunit
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Human PI3K regulatory subunit 4, p150 DNA antisense oligonucleotide #20.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Gape
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Human; phosphoinositide-3-kinase regulatory subunit 4; p150; P13K; P13 kinase; ss; antisense oligonucleotide; phosphorothioate linkage; 2'-O-methoxyethyl sugar moiety; 5-methyloyrosine; hyperproliferative disorder; cancer; Chediak-Higashi syndrome; neurodegenerative disorder; metabolic disorder; inflammation; cytostatic; immunomodulator; neurodegenerative; antimicrobial;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     New antisense oligonucleotides inhibiting the expression of phosphoinositide-3-kinase, regulatory subunit 4, p150, useful for preventing or treating diseases associated with the subunit, e.g.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        .
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Query Match 0.4%; Score 20; DB 1; Length 20; Best Local Similarity 100.0%; Pred. No. 1.4e+02; Matches 20; Conservative 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                  Sequence 20 BP; 8 A; 2 C; 4 G; 6 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                  oligonucleotide target region of the invention.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Example 15; SEQ ID NO 30; 62pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        4792 CAAAATGGTTAAGATGTACT 4811
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1 CAAAATGGTTAAGATGTACT 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         BP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      hyperproliferative disorders.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               31-MAY-2002; 2002US-00160786
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  31-MAY-2002; 2002US-00160786
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ADH26695 standard; DNA; 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            11-MAR-2004 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     (ISIS-) ISIS PHARM INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Dobie KW;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        WPI; 2004-051923/05.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        antiinflammatory.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           US2003225013-A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              04-DEC-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Freier SM,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ADH26695;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         RESULT 54
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ADH26695/
```

```
The invention relates to a compound targeted to a nucleic acid molecule encoding human phosphoinositide-3-kinase (P13K) regulatory subunit 4, p150. The compound is an antisense oligonucleotide that specifically thybridises with a nucleic acid molecule encoding P13K regulatory subunit 4, p150 and inhibits expression of the polypeptide. The antisense oligonucleotide comprises at least one modified internucleoside linkage i.e. a phosphorothioate linkage, at least one modified sugar moiety, preferably a 2'-0-methoxyethyl sugar moiety, or at least one modified nucleobase comprising a 5-methylcytosine. The antisense compounds are
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Human PI3K regulatory subunit 4, p150 DNA antisense oligonucleotide #60.
4, p150 and inhibits expression of the polypeptide. The antisense oligonucleotide comprises at least one modified internucleoside linkage i.e. a phosphorothicate linkage, at least one modified sugar moiety, preferably a 2'-0-methoxyethyl sugar moiety, or at least one modified nucleobase comprising a 5-methylcytosine. The antisense compounds are useful for modulating the expression of P13K regulatory subunit 4, p150 and for preventing or treating hyperproliferative disorders (i.e. cancer), Chediak-Higashi syndrome, neurodegenerative disorders and metabolic disorders. These may also be used in research and diagnostics and in preventing or delaying infection or inflammation. This sequence represents an antisense oligonucleotide of the invention.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Human; phosphoinositide-3-kinase regulatory subunit 4; p150; P13K; p13 kinase; ss; antisense oligonucleotide; phosphorothioate linkage; 2'-O-methoxyethyl sugar moiety; 5-metholycycosine; hyperproliferative disorder; cancer; Chediak-Higashi syndrome; neurodegenerative disorder; metabolic disorders; inflammation; cytostatic; immunomodulator; neurodegenerative; antimicrobial;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        New antisense oligonucleotides inhibiting the expression of phosphoinositide-3-kinase, regulatory subunit 4, p150, useful for preventing or treating diseases associated with the subunit, e.g. hyperproliferative disorders.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                .
0
                                                                                                                                                                                                                                                                                                                                                                                                                                              Score 20; DB 1; Length 20; Pred. No. 1.4e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                0; Indels
                                                                                                                                                                                                                                                                                                                                                                                  Sequence 20 BP; 6 A; 3 C; 7 G; 4 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                    0.4%; Sco...
100.0%; Pred. No. ...
0, Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Example 15; SEQ ID NO 70; 62pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1215 AGATCCTTCAACTCCGCTTG 1234
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          н
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   20 AGATCCTTCAACTCCGCTTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ADH26735 standard; DNA; 20 BP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  31-MAY-2002; 2002US-00160786.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       31-MAY-2002; 2002US-00160786
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          20; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      (ISIS-) ISIS PHARM INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Dobie KW;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    WPI; 2004-051923/05.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       antiinflammatory.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           US2003225013-A1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    11-MAR-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          04-DEC-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Freier SM,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ADH26735;
                                                                                                                                                                                                                                                                                                                                                                                                                                                           Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ద
                       8 \pm 9 \pm 9
```

```
The invention relates to a compound targeted to a nucleic acid molecule encoding human phosphoinositide-3-kinase (PI3K) regulatory subunit 4, cancoding human phosphoinositide-3-kinase (PI3K) regulatory subunit 4, b150. The compound is an antisense oligomucleotide that specifically can incleic acid molecule encoding PI3K regulatory subunit 4, p150 and inhibits expression of the polypeptide. The antisense oligomucleotide comprises at least one modified internucleoside linkage i.e. a phosphorothioate linkage, at least one modified sugar moiety, or at least one modified preferably a 2-0-methoxyethyl sugar moiety, or at least one modified nucleobase comprising a 5-methyloytosine. The antisense compounds are nucleobase comprising the expression of P13K regulatory subunit 4, p150 useful for modulating the expression of P13K regulatory subunit 4, p150 and for preventing or treating hyperproliferative disorders and cancer), Chediak Higashi syndrome, neurodegenerative disorders and metabolic disorders. These may also be used in research and diagnostics and in preventing or delaying infection or inflammation. This sequence
                                                                                                                                                                                                                               ö
for modulating the expression of PI3K regulatory subunit 4, p150
                                                                 diagnostics
                   and for preventing or treating hyperproliferative disorders (i.e. cancer), Chediak-Higashi syndrome, neurodegenerative disorders and metabolic disorders. These may also be used in research addiagnostics and in preventing or delaying infection or inflammation. This sequence represents an antisense oligonucleotide of the invention.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Human; phosphoinositide-3-kinase regulatory subunit 4; p150; P13K; p13 kinase; ds; antisense oligonucleotide; phosphorothioate linkage; 2'-O-methoxyethyl sugar moiety; 5-methoxyethyl sugar sorder; hyperproliferative disorder; cancer; Chediak-Higashi syndrome; neurodegenerative disorder; metabolic disorders; inflammation; cytostatic; immunomodulator; neurodegenerative; antimicrobial;
                                                                                                                                                                                                                                  Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                New antisense oligonucleotides inhibiting the expression of phosphoinositide-3-kinase, regulatory subunit 4, p150, useful for preventing or treating diseases associated with the subunit, e.g. hyperproliferative disorders.
                                                                                                                                                                                                                                  ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Human PI3K regulatory subunit 4, p150 DNA target region #41.
                                                                                                                                                                                   0.4%; Score 20; DB 1; Length 20;
100.0%; Pred. No. 1.4e+02;
tive 0; Mismatches 0; Indels
                                                                                                                                                   Sequence 20 BP; 8 A; 4 C; 6 G; 2 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Example 15; SEQ ID NO 129; 62pp; English.
                                                                                                                                                                                                                                                                           3899 TICTIGCCIAIGCCACIGIG 3918
                                                                                                                                                                                                                                                                                                          20 TTCTTGCCTATGCCACTGTG 1
                                                                                                                                                                                                                                                                                                                                                                                                                            ADH26794 standard; DNA; 20 BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     31-MAY-2002; 2002US-00160786.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             31-MAY-2002; 2002US-00160786.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             11-MAR-2004 (first entry)
                                                                                                                                                                                                                  Local Similarity 100.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      (ISIS-) ISIS PHARM INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       WPI; 2004-051923/05.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           antiinflammatory.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          US2003225013-A1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    04-DEC-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Freier SM,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ADH26794;
                                                                                                                                                                                                   Query Match
                 useful
                                                                                                                                                                                                                           Best Loca
Matches
                                                                                                                                                                                                                                                                                                                                                                                           RESULT 56
                                                                                                                                                                                                                                                                                                                                                                                                                 ADH26794
                                                                                                                                                                                                                                                                                                                                                                                                                                   셤
                   8888888888
                                                                                                                                                                                                                                                                                        ઠ
```

0.4%; Score 20; DB 1; Length 20;

Query Match

```
ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Human PI3K regulatory subunit 4, p150 DNA antisense oligonucleotide #8.
                                                                                                                                                                                                                         Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Human; phosphoinositide-3-kinase regulatory subunit 4; p150; P13K; P13 kinase; ss; antisense oligonucleotide; phosphorothioate linkage; 2'-O-methoxyethyl sugar molety; 5-methylcytosine; hyperproliferative disorder; cancer; Chediak-Higashi syndrome; neurodegenerative disorder; metabolic disorders; inflammation; cytostatic; immunomodulator; neurodegenerative; antimicrobial;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            New antisense oligonucleotides inhibiting the expression of phosphoinositide-3-kinase, regulatory subunit 4, p150, useful for preventing or treating diseases associated with the subunit, e.g.
                                                                                                                                                                                                                         ö
represents a PI3K regulatory subunit 4, p150 DNA antisense oligonucleotide target region of the invention.
                                                                                                                                                     0.4%; Score 20; DB 1; Length 20;
100.0%; Pred. No. 1.4e+02;
.ive 0; Mismatches 0; Indels
                                                                                              Sequence 20 BP; 9 A; 5 C; 2 G; 4 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Example 15; SEQ ID NO 18; 62pp; English.
                                                                                                                                                                                                                                                                                3388 AAAACTGAACTTCAGCAACT 3407
                                                                                                                                                                                                                                                                                                                AAAACTGAACTTCAGCAACT 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ВP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       hyperproliferative disorders.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  31-MAY-2002; 2002US-00160786
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   31-MAY-2002; 2002US-00160786.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ADH26683 standard; DNA; 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              (first entry)
                                                                                                                                                                                                                      20; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          (ISIS-) ISIS PHARM INC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Dobie KW;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         WPI; 2004-051923/05.
                                                                                                                                                                                        Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  antiinflammatory.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       US2003225013-A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 11-MAR-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    04-DEC-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Freier SM,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ADH26683;
                                                                                                                                                     Query Match
Best Local (
                                                                                                                                                                                                                                                                                                                                                                                                                                                               ADH26683/C

ID ADH26683/C

XX

XX

XX

ADH2668

XX

XX

B Human 1

XX

Human 2

YOUR 1

YOUR 
                                                                                                                                                                                                                  Matches
ន្តដ្ត
                                                                                                                                                                                                                                                                                                                                       셤
                                                                                                                                                                                                                                                                                ઠે
```

The invention relates to a compound targeted to a nucleic acid molecule encoding human phosphoinositide-1-kinase (P13K) regulatory subunit 4, p150. The compound is an antisense oligonucleotide that specifically hybridises with a nucleic acid molecule encoding P13K regulatory subunit 6, p150 and inhibits expression of the polypeptide. The antisense oligonucleotide comprises at least one modified internucleoside linkage i.e. a phosphorothioate linkage, at least one modified sugar modety, preferably a 2'-0-methoxyethyl sugar moiety, or at least one modified sugar modety, preferably a 2'-0-methoxyethyl sugar moiety, or at least one modified of sugar modety, or at least one modified sugar moiety, or at least one modified of modulating the expression of P13K regulatory subunit 4, p150 and for preventing or treating hyperproliferative disorders and cancer), Chediak-Higashi syndrome, neurodegenerative disorders and metabolic disorders. These may also be used in research and diagnostics and in preventing or delaying infection or inflammation. This sequence represents an antisense oligonucleotide of the invention.

Sequence 20 BP; 8 A; 3 C; 2 G; 7 T; 0 U; 0 Other;

1630 CACAATCTCTGTGGACATGA 1649

ò

```
ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               õ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             The invention relates to a compound targeted to a nucleic acid molecule encoding human phosphoinositide-3-kinase (PI3K) regulatory subunit 4, p150. The compound is an antisense oligonucleotide that specifically hybridises with a nucleic acid molecule encoding PI3K regulatory subunit 4, p150 and inhibits expression of the polypeptide. The antisense oligonucleotide comprises at least one modified internucleoside linkage i.e. a phosphorothioate linkage, at least one modified sugar molety, preferably a 2'-o-methoxyethyl sugar molety, or at least one modified
                                                                                                                                                                                                                                                                                                         Human PI3K regulatory subunit 4, p150 DNA antisense oligonucleotide #29.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                nucleobase comprising a 5-methyloytosine. The antisense compounds are useful for modulating the expression of PI3K regulatory subunit 4, p150 and for preventing or treating hyperproliferative disorders (1.e.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         cancer), Chedlak-Higashi syndrome, neurodegenerative disorders and metabolic disorders. These may also be used in research and diagnostics and in preventing or delaying infection or inflammation. This sequence represents an antisense oligonuclectide of the invention.
                                  Gapa
                                                                                                                                                                                                                                                                                                                                         Human; phosphoinositide-3-kinase regulatory subunit 4; p150; P13K; P13 kinase; ss; antisense oligonucleotide; phosphorothioate linkage; 2'-0-methoxyethyl sugar moiety; 5-methylcytosine; hyperproliferative disorder; cancer; Chediak-Higashi syndrome; neurodegenerative disorder; metabolic disorders; inflammation; cytostatic; immunomodulator; neurodegenerative; antimicrobial;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Gape
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       New antisense oligonucleotides inhibiting the expression of phosphoinositide-3-kinase, regulatory subunit 4, p150, useful for preventing or treating diseases associated with the subunit, e.g.
                                ô
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       0.4%; Score 20; DB 1; Length 20;
100.0%; Pred. No. 1.4e+02;
                              Indele
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Sequence 20 BP; 5 A; 4 C; 5 G; 6 T; 0 U; 0 Other;
               1.4e+02;
               Pred. No. 1.4
Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        100.0%; Pred. No. 1.4 tive 0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Example 15; SEQ ID NO 39; 62pp; English.
                                                                  631 GATATTCATGACTTTGAATA 650
100.08; Pre-
                                                                                                 GATATTCATGACTTTGAATA 1
                                                                                                                                                                                              ВР
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              hyperproliferative disorders.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       31-MAY-2002; 2002US-00160786.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           31-MAY-2002; 2002US-00160786
                                                                                                                                                                                              ADH26704 standard; DNA; 20
                                                                                                                                                                                                                                                                       (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Local Similarity 100.0
                                Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                (ISIS-) ISIS PHARM INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Dobie KW;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      WPI; 2004-051923/05.
             Best Local Similarity
Matches 20; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                        antiinflammatory
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               US2003225013-A1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Homo sapiens.
                                                                                                                                                                                                                                                                       11-MAR-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     04-DEC-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Freier SM,
                                                                                                                                                                                                                                  ADH26704;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Query Match
                                                                                                                                                                             ADH26704/
                                                                                                                                                          RESULT
                                                                                                                                                                                                               ઠ
                                                                                                   g
```

Human P13K regulatory subunit 4, p150 DNA antisense oligonucleotide #72.

(first entry)

11-MAR-2004

ADH26747;

ADH26747 standard; DNA; 20 BP.

Human, phosphoinositide-3-kinase regulatory subunit 4, p150; P13K; p13 kinase; ss. antisense oligonucleotide; phosphorothioate linkage; 2'-O-methoxyethyl sugar moiety; 5-metholychosine; hyperproliferative disorder; cancer; Chediak-Higashi syndrome; neurodegenerative disorder; metabolic disorders; inflammation; cytostatic; immunomodulator; neurodegenerative; antimicrobial;

antiinflammatory.

US2003225013-A1.

04-DEC-2003

```
Human P13K regulatory subunit 4, p150 DNA antisense oligonucleotide #68.
                                                                                                                                                                   Human, phosphoinositide-3-kinase regulatory subunit 4; p150; p13K; p13 kinase; ss; antisense oligonucleotide; phosphorothioate linkage; 2'-0-methoxyethyl sugar moiety; 5-methoxyetosine; hyperproliferative disorder; cancer; Chediak-Higashi syndrome; neurodegenerative disorder; metabolic disorders; inflammation; cytostatic; immunomodulator; neurodegenerative; antimicrobial;
                                                                                                                                                                                                                                                                                                                                                                                                                                                              New antisense oligonucleotides inhibiting the expression of phosphoinositide-3-kinase, regulatory subunit 4, p150, useful for preventing or treating diseases associated with the subunit, e.g. hyperproliferative disorders.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       0.4%; Score 20; DB 1; Length 20; 100.0%; Pred. No. 1.4e+02; Ive 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Sequence 20 BP; 8 A; 4 C; 4 G; 4 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Example 15; SEQ ID NO 78; 62pp; English.
CACAATCTCTGTGGACATGA 1
                                                                          BP.
                                                                                                                                                                                                                                                                                                                                               31-MAY-2002; 2002US-00160786.
                                                                                                                                                                                                                                                                                                                                                                    31-MAY-2002; 2002US-00160786
                                                                          ADH26743 standard; DNA; 20
                                                                                                                         (first entry)
                                                                                                                                                                                                                                                                                                                                                                                              (ISIS-) ISIS PHARM INC.
                                                                                                                                                                                                                                                                                                                                                                                                                     Freier SM, Dobie KW;
                                                                                                                                                                                                                                                                                                                                                                                                                                            WPI; 2004-051923/05.
                                                                                                                                                                                                                                                  antiinflammatory.
                                                                                                                                                                                                                                                                                               US2003225013-A1.
                                                                                                                                                                                                                                                                         Homo sapiens.
                                                                                                                           11-MAR-2004
                                                                                                                                                                                                                                                                                                                       04-DEC-2003
                                                                                                  ADH26743;
                20
                                                    RESULT 59
                                                                 ADH26743
                                                                                       셤
```

New antisense oligonucleotides inhibiting the expression of phosphoinositide-3-kinase, regulatory subunit 4, p150, useful for preventing or treating diseases associated with the subunit, e.g. hyperproliferative disorders.

31-MAY-2002; 2002US-00160786. 31-MAY-2002; 2002US-00160786.

(ISIS-) ISIS PHARM INC.

WPI; 2004-051923/05.

Freier SM,

Example 15; SEQ ID NO 82; 62pp; English.

```
The invention relates to a compound targeted to a nucleic acid molecule encoding human phosphoinositide-3-kinase (PI3K) regulatory subunit 4, p150. The compound is an antisense oligonucleotide that specifically tybridises with a nucleic acid molecule encoding PI3K regulatory subunit 4, p150 and inhibits expression of the polypeptide. The antisense oligonucleotide comprises at least one modified internucleoside linkage i.e. a phosphorothioate linkage, at least one modified sugar moiety, preferably a 2'-0-methoxyethyl sugar moiety, or at least one modified nucleobase comprising a 5-methyloytosine. The antisense compounds are nucleobase comprising the expression of PI3K regulatory subunit 4, p150 and for preventing or treating hyperproliferative disorders (i.e. cancer), chediak-Higashi syndrome, neurodegenerative disorders and entabolic disorders. These may also be used in research and diagnostics and in preventing or delaying infection or inflammation. This sequence is represents an antisense oligonucleotide of the invention.
```

```
The invention relates to a compound targeted to a nucleic acid molecule encoding human phosphoinositide-3-kinase (PI3K) regulatory subunit 4, pls0. The compound is an antisense oligonucleotide that specifically the compound is an antisense oligonucleotide that specifically the pls0 and inhibits expression of the polypeptide. The antisense oligonucleotide comprises at least one modified internucleoside linkage oligonucleotide comprises at least one modified internucleoside linkage preferably a 2'-0-methoxyethyl sugar moiety, or at least one modified nucleobase comprising a 5-methylcytosine. The antisense compounds are nucleobase comprising the expression of FI3K regulatory subunit 4, pls0 and for preventing or treating byperproliferative disorders (i.e. cancer), chediak-Higashi syndrome, neurodegenerative disorders and cancer), chediak-Higashi syndrome, neurodegenerative disorders and in preventing or delaying infection or inflammation. This sequence and in preventing or delaying infection or inflammation. This sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Score 20; DB 1; Length 20;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Sequence 20 BP; 6 A; 4 C; 6 G; 4 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Pred. No. 1.4e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               100.0%; Preq. ...
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             4424 CATCTGTGTCCTACTACAGG 4443
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               20 CATCTGTGTCCTACTACAGG 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ADH26760 standard; DNA; 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    20; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ADH26760;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      RESULT 61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ADH26760
ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             qq
```

ö

Gaps

; 0

4292 TCCATGGTATCTACTGTAGT 4311

ò 셤

rccarggrarcracrgragr 1

20

100.0%; Pic

Conservative

Best Local Similarity Matches 20; Conserv

Query Match

```
The invention relates to a compound targeted to a nucleic acid molecule encoding human phosphoinositide-3-kinase (PI3K) regulatory subunit 4, p150 The compound is an antisense oligonucleotide that specifically hybridises with a nucleic acid molecule encoding PI3K regulatory subunit 4, p150 and inhibits expression of the polypeptide. The antisense coligonucleotide comprises at least one modified internucleoside linkage i.e. a phosphorothioate linkage at least one modified sugar molety, preferably a 2'-O-methoxyethyl sugar molety, or at least one modified in nucleobase comprising a 5-methylcytosine. The antisense compounds are useful for modulating the expression of F13K regulatory subunit 4, p150 and for preventing or treating hyperpoliferative disorders and cancer), Chediak-Higashi syndrome, neurodegenerative disorders and metabolic disorders. These may also be used in research and diagnostics and in preventing or delaying infection or inflammation. This sequence represents a F13K regulatory subunit 4, p150 DNA antisense
Human, phosphoinositide-1-kinase regulatory subunit 4; p150; P13K; P13 kinase; ds; antisense oligonucleotide; phosphorothioate linkage; 2'-0-methoxytethyl sugar moiety; 5-methylcytosine; hyperproliferative disorder; cancer; Chediak-Higashi syndrome; neurodegenerative disorder; metabolic disorders; inflammation;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Human; phosphoinositide-3-kinase regulatory subunit 4; p150; P13K; P13 Kinase; ds; antisense oligonucleocide; phosphorothioate linkage; 2.-0-methoxyethyl sugar moiety; 5-methyloytosine; hyperproliferative disorder; cancer; Chediak-Higashi syndrome;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              New antisense oligonucleotides inhibiting the expression of phosphoinositide-3-kinase, regulatory subunit 4, p150, useful for preventing or treating diseases associated with the subunit, e.g. hyperproliferative disorders.
                                                                                                                                      cytostatic; immunomodulator; neurodegenerative; antimicrobial;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Human PI3K regulatory Bubunit 4, p150 DNA target region #37.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sequence 20 BP; 5 A; 6 C; 5 G; 4 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  0.4%; Score 20; DB 1; L. 00.0%; Pred. No. 1.4e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 oligonucleotide target region of the invention.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Pred. No. 1.4
0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Example 15; SEQ ID NO 115; 62pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        2391 TGGCTGGCAAAGCTCCTCAA 2410
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1 TGGCTGGCAAAGCTCCTCAA 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ADH26790 standard; DNA; 20 BP.
                                                                                                                                                                                                                                                                                                                                                                      31-MAY-2002; 2002US-00160786.
                                                                                                                                                                                                                                                                                                                                                                                                                         31-MAY-2002; 2002US-00160786.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          100.08;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Local Similarity 100.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            (ISIS-) ISIS PHARM INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Freier SM, Dobie KW;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             WPI; 2004-051923/05.
                                                                                                                                                              antiinflammatory
                                                                                                                                                                                                                                                               US2003225013-A1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             11-MAR-2004
                                                                                                                                                                                                                                                                                                                   04-DEC-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ADH26790;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    RESULT 63
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ADH26790
        ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              The invention relates to a compound targeted to a nucleic acid molecule encoding human phosphoinositide-3-kinase (P13K) regulatory subunit 4, p150. The compound is an antisense oligonuclectide that specifically hybridises with a nucleic acid molecule encoding P13K regulatory subunit 4, p150 and inhibits expression of the polypeptide. The antisense oligonuclectide comprises at least one modified internucleoside linkage i.e. a phosphorothicate linkage, at least one modified sugar moiety, or at least one modified nucleobase comprising a 5-methylotrosine. The antisense compounds are useful for modulating the expression of P13K regulatory subunit 4, p150 and for preventing or treating hyperproliferative disorders (i.e.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           cancer), Chedlak-Higashi syndrome, neurodegenerative disorders and metabolic disorders. These may also be used in research and disgnostics and in preventing or delaying infection or inflammation. This sequence represents a PI3K regulatory subunit 4, p150 DNA antisense
                                                                                                Human; phosphoinositide-3-kinase regulatory subunit 4; p150; P13K; P13 kinase; ds; antisense oligonucleotide; phosphorothioate linkage; 2'-O-methoyethyl sugar moiety; 5-methylcytosine; hyperproliferative disorder; cancer; Chediak-Higashi syndrome; neurodegenerative disorder; metabolic disorders; inflammation; cytostatic; immunomodulator; neurodegenerative; antimicrobial;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           0; Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    New antisense oligonucleotides inhibiting the expression of phosphoinositide-3-kinase, regulatory subunit 4, p150, useful for preventing or treating diseases associated with the subunit, e.g.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Human PI3K regulatory Bubunit 4, p150 DNA target region #27.
                                                     Human PI3K regulatory subunit 4, p150 DNA target region #7.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Score 20; DB 1; Length 20;
Pred. No. 1.4e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Sequence 20 BP; 3 A; 4 C; 8 G; 5 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    oligonucleotide target region of the invention.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     0.4%; Scc. 100.0%; Pred. No. 1...
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Example 15; SEQ ID NO 95; 62pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CGAGAAGGCCTGGTCGTTGT 722
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CGAGAAGGCCTGGTCGTTGT 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ВР
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     hyperproliferative disorders.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       31-MAY-2002; 2002US-00160786
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          31-MAY-2002; 2002US-00160786
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ADH26780 standard; DNA; 20
  (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        20; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          (ISIS-) ISIS PHARM INC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Freier SM, Dobie KW;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 WPI; 2004-051923/05.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Query Match
Best Local Similarity
                                                                                                                                                                                                                                                               antiinflammatory.
                                                                                                                                                                                                                                                                                                                                                                   US2003225013-A1
                                                                                                                                                                                                                                                                                                                   domo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              11-MAR-2004
     11-MAR-2004
                                                                                                                                                                                                                                                                                                                                                                                                                    04-DEC-2003.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            703
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ADH26780;
```

ö

**Gape** 

ô

Matchea

RESULT 62 ADH26780 ID ADH2

XXXXXXXXX

용

ઠે

Length 20; Indels

```
ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                요
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   The invention relates to a compound targeted to a nucleic acid molecule encoding human phosphoinositide-3-kinase (PI3K) regulatory subunit 4, p150 The compound is an antisense oligonucleotide that specifically hybridises with a nucleic acid molecule encoding PI3K regulatory subunit 4, p150 and inhibits expression of the polypeptide. The antisense oligonucleotide comprises at least one modified internucleoside linkage i.e. a phosphorothicate linkage, at least one modified sugar moiety, preferably a 2'-0-methoxyethyl sugar moiety, or at least one modified nucleobase comprising a 5-methyloytosine. The antisense compounds are useful for modulating the expression of P13K regulatory subunit 4, p150 and for preventing or treating hyperproliferative disorders and metabolic disorders. These may also be used in research and diagnostics and in preventing or delaying infection or inflammation. This sequence represents a P13K regulatory subunit 4, p150 DNA antisense
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Human; phosphoinositide-3-kinase regulatory subunit 4; p150; p13K; p13 kinase; ds; antisense oligonucleotide; phosphorothioate linkage; 2'-O-methoxyethyl sugar moiety; 5-methylcytosine; hyperproliferative disorder; cancer; Chediak-Higashi syndrome; neurodegenerative disorder; metabolic disorders; inflammation; cytostatic; immunomodulator; neurodegenerative; inmicrobial; antinilammatory.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Gaps
                                                                                                                                                                                                                                                           New antisense oligonucleotides inhibiting the expression of phosphoinositide-3-kinase, regulatory subunit 4, p150, useful for preventing or treating diseases associated with the subunit, e.g. hyperproliferative disorders.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    .
0
neurodegenerative disorder; metabolic disorders; inflammation; cytostatic; immunomodulator; neurodegenerative; antimicrobial; antiinflammatory.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Human PI3K regulatory subunit 4, p150 DNA target region #52.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           0.4%; Score 20; DB 1; Length 20;
100.0%; Pred. No. 1.4e+02;
ve 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sequence 20 BP; 7 A; 3 C; 3 G; 7 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Query Match 0.4%; Score 20; DB Best Local Similarity 100.0%; Pred. No. 1.4 Matches 20; Conservative 0; Mismatches
                                                                                                                                                                                                                                                                                                                                   Example 15; SEQ ID NO 125; 62pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                3057 AGTTGATCTTGTTAAAACCA 3076
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1 AGTTGATCTTGTTAAAACCA 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ADH26805 standard; DNA; 20 BP
                                                                                                                                                                 31-MAY-2002; 2002US-00160786.
                                                                                                                                      31-MAY-2002; 2002US-00160786
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            11-MAR-2004 (first entry)
                                                                                                                                                                                          (ISIS-) ISIS PHARM INC
                                                                                                                                                                                                                  Freier SM, Dobie KW;
                                                                                                                                                                                                                                           WPI; 2004-051923/05.
                                                                                      US2003225013-A1.
                                                             Homo sapiens
                                                                                                              04-DEC-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ADH26805;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 RESULT 64
          g
```

```
The invention relates to a compound targeted to a nucleic acid molecule encoding human phosphoinositide-3-kinase (PI3K) regulatory subunit 4, p150. The compound is an antisense oligonucleocide that specifically hypothess with a nucleic acid molecule encoding PI3K regulatory subunit hypothess with a nucleic acid molecule encoding PI3K regulatory subunit hypothess with a nucleic acid molecule encoding PI3K regulatory subunit coligonucleotide comprises at least one modified internucleoside linkage i.e. a phosphorothioate linkage, at least one modified sugar moiety, preferably a 2'-O-methoxyethyl sugar moiety, or at least one modified nucleobase comprising a 5-methylcytosine. The antisense compounds are uncleobase comprising the expression of F13K regulatory subunit 4, p150 and for preventing or treating hyperproliferative disorders and cancer). Chediak-Higashi syndrome, neurodegenerative disorders and metabolic disorders. These may also be used in research and diagnostics and in preventing or delaying infection or inflammation. This sequence represents a P13K regulatory subunit 4, p150 DNA antisense
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Human PI3K regulatory subunit 4, p150 DNA antisense oligonucleotide #7.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Human; phosphoinositide-3-kinase regulatory subunit 4; p150; P13K; P13 kinase; ss; antieense oligonucleotide; phosphorothioate linkage; 2'-0-methoxyethyl sugar moiety; 5-methyloytosine; hypexproliferative disorder; cancer; Chediak-Higashi syndrome; neurodegenerative disorder; metabolic disorders; inflammation; cytosteatic; immunomodulator; neurodegenerative; immunomodulator; neurodegenerative; antimicrobial; antiinflammatory.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              New antisense oligonuclectides inhibiting the expression of phosphoinositide-3-kinase, regulatory subunit 4, p150, useful for preventing or treating diseases associated with the subunit, e.g.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             0.4%; Score 20; DB 1; Length 20;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Sequence 20 BP; 6 A; 5 C; 5 G; 4 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Pred. No. 1.4e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Local Similarity 100.0%; Pred. No. 1.4 Local Similarity 100.0%; Pred. No. 1.4 es 20; Conservative 0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Example 15; SEQ ID NO 140; 62pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      4309 AGTCCTGCAGATGGAAATCC 4328
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1 AGTCCTGCAGATGGAAATCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ADH26682 standard; DNA; 20 BP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       hyperproliferative disorders.
                                                                                                                                                                                                                31-MAY-2002; 2002US-00160786
                                                                                                                                                                                                                                                                                          31-MAY-2002; 2002US-00160786
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           11-MAR-2004 (first entry)
                                                                                                                                                                                                                                                                                                                                                                 (ISIS-) ISIS PHARM INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                            Dobie KW;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   WPI; 2004-051923/05.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      US2003225013-A1
                                                                      US2003225013-A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Homo sapiens
Homo sapiens.
                                                                                                                                         04-DEC-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                Freier SM,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ADH26682;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       RESULT 65
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ADH26682
```

```
ADH26723;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ADH26723/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Ношо
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       RESULT 67
 ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                g
                                                                                                                                                                                                                                   The invention relates to a compound targeted to a nucleic acid molecule encoding human phosphoinositide--kinase (P13K) regulatory subunit 4, p150. The compound is an antisense oligonucleotide that specifically hybridises with a nucleic acid molecule encoding P13K regulatory subunit 6, p150 and inhibits expression of the polypeptide. The antisense oligonucleotide comprises at least one modified internucleoside linkage i.e. a phosphorothioate linkage, at least one modified sugar moiety, preferably a 2'-0-methoxyethyl sugar moiety, or at least one modified nucleotheose comprising a 5-methyloytosine. The antisense compounds are useful for modulating the expression of P13K regulatory subunit 4, p150 and for preventing or treating hyperproliferative disorders and cancers), Chediak-Higashi syndrome, neurodegenerative disorders and metabolic disorders. These may also be used in research and diagnostics and in preventing or delaying infection or inflammation. This sequence represents an antisense oligonucleotide of the invention.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Human PI3K regulatory subunit 4, pl50 DNA antisense oligonucleotide #32.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        PI3 kinase; se; antisense oligonucleotide; phosphorothicate linkage; 2'-O-methoxyethyl sugar molety; 5-methylytokaine; hyperproliferative disorder; cancer; Chediak-Higashi syndrome; neurodegenerative disorder; metabolic disorders; inflammation;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Human; phosphoinositide-3-kinase regulatory subunit 4; p150; P13K;
                                                                                                                                                              phosphoinositide-3-kinase, regulatory subunit 4, p150, useful for preventing or treating diseases associated with the subunit, e.g.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           cytostatic; immunomodulator; neurodegenerative; antimicrobial; antinflammatory.
                                                                                                                                                  antisense oligonucleotides inhibiting the expression of
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   0.4%; Score 20; DB 1; Length 20; 100.0%; Pred. No. 1.4e+02; ive 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                           Sequence 20 BP; 6 A; 4 C; 4 G; 6 T; 0 U; 0 Other;
                                                                                                                                                                                                               Example 15; SEQ ID NO 17; 62pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       559 CTTGCCATTATGGGAAATCA 578
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CTTGCCATTATGGGAAATCA 1
                                                                                                                                                                                     hyperproliferative disorders.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ADH26707 standard; DNA; 20 BP
                       31-MAY-2002; 2002US-00160786
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    31-MAY-2002; 2002US-00160786.
                                                31-MAY-2002; 2002US-00160786
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           31-MAY-2002; 2002US-00160786
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            11-MAR-2004 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              20; Conservative
                                                                        (ISIS-) ISIS PHARM INC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Local Similarity
                                                                                                                          WPI; 2004-051923/05.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         US2003225013-A1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Homo sapiens
04-DEC-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 04-DEC-2003
                                                                                                 Freier SM,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ADH26707;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Matches
ò
```

```
The invention relates to a compound targeted to a nucleic acid molecule encoding human phosphoinostide-3-kinase (PI3K) regulatory subunit 4, p150. The compound is an antisense oligonucleotide that specifically hybridises with a nucleic acid molecule encoding Pi3K regulatory subunit 4, p150 and inhibits expression of the polypeptide. The antisense oligonucleotide comprises at least one modified internucleoside linkage i.e. a phosphorothioate linkage, at least one modified supar moiety, preferably a 2'-O-methoxyethyl sugar moiety, or at least one modified nucleobase comprising a 5-methylcytosine. The antisense compounds are useful for modulating the expression of PI3K regulatory subunit 4, p150 and for preventing or treating hyperproliferative disorders (1.e.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Human PI3K regulatory subunit 4, p150 DNA antisense oligonucleotide #48.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             cancer), Chediak-Higashi syndrome, neurodegenerative disorders and metabolic disorders. These may also be used in research and diagnostics and in preventing or delaying infection or inflammation. This sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Human; phosphoinositide-3-kinase regulatory subunit 4; p150; P13K; P13 kinase; ss; antisense oligonucleotide; phosphorothioate linkage; 2'-O-methoxyethyl sugar moiety; 5-methylcytosine; hyperproliferative disorder; cancer; Chediak-Higashi syndrome; neurodegenerative disorder; metabolic disorders; inflammation; cytostatic; immunomodulator; neurodegenerative; antimicrobial;
                                                                                                                                                                                                                             New antisense oligonucleotides inhibiting the expression of phosphoinositide-3-kinase, regulatory subunit 4, p150, useful for preventing or treating diseases associated with the subunit, e.g.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Length 20;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      represents an antisense oligonucleotide of the invention.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           DB 1; Ler
1.4e+02;
thes 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Sequence 20 BP; 5 A; 4 C; 5 G; 6 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           0.4%; Score 20; DB
100.0%; Pred. No. 1.4
ive 0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                      Example 15; SEQ ID NO 42; 62pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1978 GCCCAAGATGATGCTACTAT 1997
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    20 GCCCAAGATGATGCTACTAT 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ADH26723 standard; DNA; 20 BP
                                                                                                                                                                                                                                                                                                                                              hyperproliferative disorders.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           31-MAY-2002; 2002US-00160786.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        31-MAY-2002; 2002US-00160786.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Query Match 0.4%
Best Local Similarity 100.0
Matches 20, Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   11-MAR-2004 (first entry)
(ISIS-) ISIS PHARM INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                (ISIS-) ISIS PHARM INC
                                                                            Freier SM, Dobie KW;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Freier SM, Dobie KW;
                                                                                                                                                    WPI; 2004-051923/05.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             antiinflammatory.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  US2003225013-A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               04-DEC-2003
```

```
Example 15; SEQ ID NO 62; 62pp; English.
hyperproliferative disorders.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 (ISIS-) ISIS PHARM INC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Dobie KW;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 WPI; 2004-051923/05.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         antiinflammatory.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              US2003225013-A1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      04-DEC-2003.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Freier SM,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ADH26732;
                                                                                                                                                                                                                                                                                              Query Match
                                                                                                                                                                                                                                                                                                             Best Loca
Matches
                                                                                                                                                                                                                                                                                                                                                                                                                              ADH26732,
                                                                                                                                                                                                                                                                                                                                                                                                                 RESULT
                                                                                                                                                                                                                                                                                                                                                                                                                                                     \mathbb{Z}_{X}
                                                                                                                                                                                                                                                                                                                                                                       g
                                                                                                                                                                                                                                                                                                                                                   ð
                                                                                                                                                                                                                                                                                                                                                                                           ö
                                                                                                                       The invention relates to a compound targeted to a nucleic acid molecule encoding human phosphoinositide-3-kinase (PI3K) regulatory subunit 4, p150. The compound is an antisense oligonuclectide that specifically hybridises with a nucleic acid molecule encoding PI3K regulatory subunit by pridises with a nucleic acid molecule encoding PI3K regulatory subunit oligonuclectide comprises at least one modified internucleoside linkage i.e. a phosphorothioate linkage, at least one modified sugar moiety, preferably a 2'-O-methoxyethyl sugar moiety, or at least one modified nucleobase comprising a 5-methylcytosine. The antisense compounds are useful for modulating the expression of PI3K regulatory subunit 4, p150 useful for preventing or treating hyperproliferative disorders (i.e.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Human PI3K regulatory subunit 4, p150 DNA antisense oligonucleotide #52.
                                                                                                                                                                                                                                                                     cancer), Chediak-Higashi syndrome, neurodegenerative disorders and metabolic disorders. These may also be used in research and diagnostics and in preventing or delaying infection or inflammation. This sequence represents an antisense oligonucleotide of the invention.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Human; phosphoinositide-3-kinase regulatory subunit 4; p150; P13K; P13 kinase; ss; antisense oligonucleotide; phosphorothioate linkage; 2'-O-methoxyethyl sugar moiety; 5-methylycycosine; hyperproliferative disorder; cancer; Chediak-Higashi syndrome; neurodegenerative disorder; metabolic disorders; inflammation; cytostatic; immunomodulator; neurodegenerative; antimicrobial;
                                                                                                                                                                                                                                                                                                                                                                                           Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   New antisense oligonucleotides inhibiting the expression of phosphoinositide-3-kinase, regulatory subunit 4, p150, useful for preventing or treating diseases associated with the subunit, e.g.
                               New antisense oligonucleotides inhibiting the expression of phosphoinositide-3-kinase, regulatory subunit 4, p150, useful for preventing or treating diseases associated with the subunit, e.g. hyperproliferative disorders.
                                                                                                                                                                                                                                                                                                                                                                                            ö
                                                                                                                                                                                                                                                                                                                                                                Score 20; DB 1; Length 20;
Pred. No. 1.4e+02;
                                                                                                                                                                                                                                                                                                                                                                                           0; Indels
                                                                                                                                                                                                                                                                                                                                         Sequence 20 BP; 8 A; 5 C; 6 G; 1 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                   100.0%; Pred. No. 1.4
Live 0; Mismatches
                                                                                                      Example 15; SEQ ID NO 58; 62pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                        3250 TCTGCTGGCATTTGTGTCCC 3269
                                                                                                                                                                                                                                                                                                                                                                                                                                          20 TCTGCTGGCATTTGTGTCCC 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ADH26727 standard; DNA; 20 BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          31-MAY-2002; 2002US-00160786
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   31-MAY-2002; 2002US-00160786
                                                                                                                                                                                                                                                                                                                                                                       0.4%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             (ISIS-) ISIS PHARM INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 WPI; 2004-051923/05.
                                                                                                                                                                                                                                                                                                                                                                                     Best Local Similarity
Matches 20; Conserv
               WPI; 2004-051923/05
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        antiinflammatory
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            US2003225013-A1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         11-MAR-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     04-DEC-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Freier SM,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ADH26727;
                                                                                                                                                                                                                                                                                                                                                                          Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              RESULT 68
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ADH26727
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    8
```

```
The invention relates to a compound targeted to a nucleic acid molecule cending human phosphoinositide-3-kinase (PI3K) regulatory subunit 4, encoding human phosphoinositide-3-kinase (PI3K) regulatory subunit 4, pls0. The compound is an antisense oligonucleotide that specifically cc 4, pis0 and inhibite expression of the polypeptide. The antisense oligonucleotide comprises at least one modified internucleoside linkage oligonucleotide comprises at least one modified sugar moiety, i.e. a phosphorothioate linkage, at least one modified sugar moiety, or at least one modified cross moiety, or at least one modified or preferably a 2'-0-methoxychtyl sugar moiety, or at least one modified custing the expression of PI3K regulatory subunit 4, pls0 useful for modulating the expression of PI3K regulatory subunit 4, pls0 cancer, cancer, thigashi syndrome, neurodegenerative disorders and cancers. These may also be used in research and diagnostics and in preventing or delaying infection or inflammation. This sequence represents an antisense oligonucleotide of the invention.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               The invention relates to a compound targeted to a nucleic acid molecule
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Human PI3K regulatory subunit 4, p150 DNA antisense oligonucleotide #57.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Human; phosphoinositide-3-kinase regulatory subunit 4; p150; P13K; P13 kinase; ss; antisense oligonucleotide; phosphorothioate linkage; 2'-O-methoxyethyl sugar moiety; 5-metholycycosine; hyperproliferative disorder; cancer; Chediak-Higashi syndrome; neurodegenerative disorder; metabolic disorders; inflammation; cytostatic; immunomodulator; neurodegenerative; antimicrobial;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           New antisense oligonucleotides inhibiting the expression of phosphoinositide-3-kinase, regulatory subunit 4, p150, useful for preventing or treating diseases associated with the subunit, e.g. hyperproliferative disorders.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      .,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Score 20; DB 1; Length 20;
Pred. No. 1.4e+02;
0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Sequence 20 BP; 4 A; 6 C; 3 G; 7 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          100.0%; Pred. No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Example 15; SEQ ID NO 67; 62pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      3431 GCAATGCTGAGAGAATAGCT 3450
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Н
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      20 GCAATGCTGAGAGAATAGCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                31-MAY-2002; 2002US-00160786.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    31-MAY-2002; 2002US-00160786
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ADH26732 standard; DNA; 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 11-MAR-2004 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Local Similarity 100.
```

```
ö
encoding human phosphoinositide-3-kinase (PI3K) regulatory subunit 4, pl50. The compound is an antisense oligonucleotide that specifically hybridises with a nucleic acid molecule encoding PI3K regulatory subunit 4, pl50 and inhibits expression of the polypeptide. The antisense oligonucleotide comprises at least one modified internucleoside linkage i. e. a phosphorothioate linkage, at least one modified sugar moiety, preferably a 2'-O-methoxyethyl squar moiety, or at least one modified nucleobase comprising a 5-methyloytosine. The antisense compounds are useful for modulating the expression of PI3K regulatory subunit 4, pl50 and for preventing or treating hyperproliferative disorders and metabolic disorders. These may also be used in research and diagnostics and in preventing or delaying infection or inflammation. This sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 The invention relates to a compound targeted to a nucleic acid molecule encoding human phosphoinositide-3-kinase (PI3K) regulatory subunit 4, p150. The compound is an antisense oligonucleotide that specifically hybridises with a nucleic acid molecule encoding PI3K regulatory subunit 4, p150 and inhibits expression of the polypeptide. The antisense oligonucleotide comprises at least one modified internucleoside linkage
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Human PI3K regulatory subunit 4, p150 DNA antisense oligonucleotide #62.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Human; phosphoinositide-3-kinase regulatory subunit 4; p150; P13K; P13 kinase; ss; antisense oligonucleotide; phosphorothioate linkage; 2'-O-methoxyethyl sugar molety; 5-methylcytosine; hyperproliferative disorder; cancer; Chediak-Higashi syndrome; neurodegenerative disorder; metabolic disorders; inflammation; cytostatic; immunomodulator; neurodegenerative; antimicrobial;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 New antisense oligonucleotides inhibiting the expression of phosphoinositide-3-kinase, regulatory subunit 4, p150, useful for preventing or treating diseases associated with the subunit, e.g. hyperproliferative disorders.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Score 20; DB 1; Length 20;
Pred. No. 1.4e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                        represents an antisense oligonucleotide of the invention.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Sequence 20 BP; 9 A; 2 C; 5 G; 4 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       0.4%; Scor.
100.0%; Pred. No. ...
0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Example 15; SEQ ID NO 72; 62pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ADH26737 standard; DNA; 20 BP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        31-MAY-2002; 2002US-00160786.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               31-MAY-2002; 2002US-00160786.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     20; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   (ISIS-) ISIS PHARM INC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Freier SM, Dobie KW;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        WPI; 2004-051923/05.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              antiinflammatory
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       US2003225013-A1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             11-MAR-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       04-DEC-2003.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ADH26737;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Query Match
Best Local S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     RESULT 70
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ADH26737/
XAC ADH2
XX ADH2
XX ADH2
XXX ADH2
XXX HUMB
XXX HUMB
XXX HOMO
XXX T LSI
XX T L
       Š
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         요
```

```
ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         The invention relates to a compound targeted to a nucleic acid molecule encoding human phosphoinositide-3-kinase (PISK) regulatory subunit 4, p150. The compound is an antisense oligonucleotide that specifically hybridises with a nucleic acid molecule encoding PISK regulatory subunit 4, p150 and inhibits expression of the polypeptide. The antisense oligonucleotide comprises at least one modified internucleoside linkage i.e. a phosphorothioate linkage, at least one modified sugar moiety, preferably a 2'-O-methoxyethyl sugar moiety, or at least one modified unscleobase comprising a 5-methyloytosine. The antisense compounds are useful for modulating the expression of PISK regulatory subunit 4, p150 and for preventing or treating hyperproliferative disorders (1.e.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Human PI3K regulatory subunit 4, p150 DNA antisense oligonucleotide #69.
i.e. a phosphorothioate linkage, at least one modified sugar moiety, preferably a 2'-0-methoxyethyl sugar moiety, or at least one modified uncleobase comprising a 5-methylcytosine. The antisense compounds are useful for modulating the expression of PI3K regulatory subunit 4, p150 and for preventing or treating hyperproliferative disorders (i.e. cancer), Chediak-Higashi syndrome, neurodegenerative disorders and metabolic disorders. These may also be used in research and diagnostics and in preventing or delaying infection or inflammation. This sequence represents an antisense oligonucleotide of the invention.
                                                                                                                                                                                                                                                                                                    Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Human; phosphoinositide-3-kinase regulatory subunit 4; p150; p13K; p13 kinase; ss; antisense oligonucleotide; phosphorothioate linkage; 2'-O-methoxyethyl sugar moiety; 5-methylcytosine; hyperproliferative disorder; cancer; Chediak-Higashi syndrome; neurodegenerative disorder; metabolic disorder; inflammation; cytostatic; immunomodulator; neurodegenerative; antimicrobial;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                New antisense oligonuclectides inhibiting the expression of phosphoinositide-3-kinase, regulatory subunit 4, p150, useful for preventing or treating diseases associated with the subunit, e.g.
                                                                                                                                                                                                                                                                                                    ö
                                                                                                                                                                                                                                                           0.4%; Score 20; DB 1; Length 20;
                                                                                                                                                                                                                                                                                               0; Indels
                                                                                                                                                                                                                 Sequence 20 BP; 7 A; 2 C; 2 G; 9 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                              1.46+02;
                                                                                                                                                                                                                                                                              ; Pred. No. 1.4
0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Example 15; SEQ ID NO 79; 62pp; English.
                                                                                                                                                                                                                                                                                                                                           3967 ACTTTAAAGCATGATTTAAA 3986
                                                                                                                                                                                                                                                                                                                                                                     ACTITAAAGCAIGAITIAAA 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ADH26744 standard; DNA; 20 BP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       31-MAY-2002; 2002US-00160786.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 hyperproliferative disorders.
                                                                                                                                                                                                                                                                              100.08;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                31-MAY-2002; 2002US-00160786
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         11-MAR-2004 (first entry)
                                                                                                                                                                                                                                                                                                 20; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         (ISIS-) ISIS PHARM INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Dobie KW;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         WPI; 2004-051923/05.
                                                                                                                                                                                                                                                                            Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       antiinflammatory
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       US2003225013-A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                04-DEC-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Freier SM,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ADH26744;
                                                                                                                                                                                                                                                           Query Match
                                                                                                                                                                                                                                                                                                 Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                RESULT 71
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ADH26744/
      8888888888
                                                                                                                                                                                                                                                                                                                                                                               셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               8
```

```
The invention relates to a compound targeted to a nucleic acid molecule encoding human phosphoinostide-3-kinase (PI3K) regulatory subunit 4, p150 The compound is an antisense oligonucleotide that specifically hybridises with a nucleic acid molecule encoding PI3K regulatory subunit 4, p150 and inhibits expression of the polypeptide. The antisense oligonucleotide comprises at least one modified internucleoside linkage i.e. a phosphorothioate linkage, at least one modified sugar moiety, preferably a 2'-O-methoxyethyl sugar moiety, or at least one modified nucleobase comprising a 5-methylcytosine. The antisense compounds are useful for modilating the expression of P13K regulatory subunit 4, p150 and for preventing or treating hyperproliferative disorders and metabolic disorders. These may also be used in research and diagnostics and in preventing or delaying infection or inflammation. This sequence represents a P13K regulatory subunit 4, p150 DNA antisense
                                                                                                                                                                         ö
                   metabolic disorders. These may also be used in research and diagnostics and in preventing or delaying infection or inflammation. This sequence represents an antisense oligonucleotide of the invention.
                                                                                                                                                                         Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Human; phosphoinositide-3-kinase regulatory subunit 4; p150; P13K; p13 kinase; ds; antisense oligonucleotide; phosphorothioate linkage; 2'-0-methoxyethyl sugar moiety; 5-methylcytosine; hyperproliferative disorder; cancer; Chediak-Higashi syndrome; neurodegenerative disorder; metabolic disorders; inflammation;
 neurodegenerative disorders and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       New antisense oligonucleotides inhibiting the expression of phosphoinositide-3-kinase, regulatory subunit 4, p150, useful for preventing or treating diseases associated with the subunit, e.g. hyperproliferative disorders.
                                                                                                                                                                         ..
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          cytostatic; immunomodulator; neurodegenerative; antimicrobial; antiinflammatory.
                                                                                                                                                                                                                                                                                                                                                                                                                                                             Human PI3K regulatory subunit 4, p150 DNA target region #15.
                                                                                                                               0.4%; Score 20; DB 1; Length 20;
100.0%; Pred. No. 1.4e+02;
ive 0; Mismatches 0; Indels
                                                                                             Sequence 20 BP; 4 A; 5 C; 5 G; 6 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Example 15; SEQ ID NO 103; 62pp; English.
Chediak-Higashi syndrome,
                                                                                                                                                                                                            4309 AGTCCTGCAGATGGAAATCC 4328
                                                                                                                                                                                                                                    ADH26768 standard; DNA; 20 BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            31-MAY-2002; 2002US-00160786.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           31-MAY-2002; 2002US-00160786
                                                                                                                                                                                                                                                                                                                                                                                                                         (first entry)
                                                                                                                                                                           20; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   (ISIS-) ISIS PHARM INC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Freier SM, Dobie KW;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             WPI; 2004-051923/05.
                                                                                                                                                       Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                US2003225013-A1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                           11-MAR-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      04-DEC-2003
                                                                                                                                                                                                                                                    20
                                                                                                                                                                                                                                                                                                                                                                                    ADH26768;
                                                                                                                                     Query Match
Best Local (
                                                                                                                                                                         Matches
                                                                                                                                                                                                                                                                                                                                ADH26768
                                                                                                                                                                                                                                                                                                                                                  8888888
                                                                                                                                                                                                                ઠે
                                                                                                                                                                                                                                                    셤
```

```
The invention relates to a compound targeted to a nucleic acid molecule encoding human phosphoinositide-3-kinase (PI3K) regulatory subunit 4, p150 p150. The compound is an antisense oligonucleotide that specifically phyridises with a nucleic acid molecule encoding PI3K regulatory subunit 4, p150 and inhibits expression of the polypeptide. The antisense oligonucleotide comprises at least one modified internucleoside linkage i.e. a phosphorothioate linkage, at least one modified sugar moiety, preferably a 2'-O-methoxyethyl sugar moiety, or at least one modified nucleobase comprising a 5-methylcytosine. The antisense compounds are useful for modilating the expression of F13K regulatory subunit 4, p150 and for preventing or treating hyperproliferative disorders and metabolic disorders. These may also be used in research and diagnostics and in preventing or delaying infection or inflammation. This sequence represents a P13K regulatory subunit 4, p150 DNA antisense
                                                                                    ö
                                                                                    Gaps
                                                                                                                                                                                                                                                                                                                                                                                       Human, phosphoinositide-3-kinase regulatory subunit 4; p150; P13K; P13 kinase; ds; antisense oligonucleotide; phosphorothioate linkage; 2'-0-methoxyethyl sugar moiety; 5-methylcytosine; hyperproliferative disorder; cancer; Chediak-Higashi syndrome; neurodegenerative disorder; metabolic disorders; inflammation; cytostatic; immunomodulator; neurodegenerative; antimicrobial;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        New antisense oligonucleotides inhibiting the expression of phosphoinositide-3-kinase, regulatory subunit 4, p150, useful for preventing or treating diseases associated with the subunit, e.g.
                                                                                    ;
0
                                                                                                                                                                                                                                                                                                                                                        Human PI3K regulatory subunit 4, p150 DNA target region #26.
                                                Length 20;
                                                                                    Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Sequence 20 BP; 9 A; 4 C; 3 G; 4 T; 0 U; 0 Other;
             Sequence 20 BP; 7 A; 6 C; 2 G; 5 T; 0 U; 0 Other;
                                                                     1.4e+02;
                                                DB 1;
                                                           100.0%; Prec. ...
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Example 15; SEQ ID NO 114; 62pp; English.
                                                0.4%; Score 20;
100.0%; Pred. No.
                                                                                                                       1083 CACTTATCTTCCAGAGACA 1102
                                                                                                                                                         CACTTATCTTCCAGAGACA 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               hyperproliferative disorders.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  31-MAY-2002; 2002US-00160786.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    31-MAY-2002; 2002US-00160786.
                                                                                                                                                                                                                                                   ADH26779 standard; DNA; 20
                                                                                                                                                                                                                                                                                                                      11-MAR-2004 (first entry)
                                                                                      Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         (ISIS-) ISIS PHARM INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Dobie KW;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         WPI; 2004-051923/05.
                                                                     Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      antiinflammatory
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             US2003225013-A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Homo sapiens
                                                                                    20;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                04-DEC-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Freier SM,
                                                                                                                                                                                                                                                                                      ADH26779;
                                                Query Match
Best Local &
                                                                                       Matches
                                                                                                                                                                                                                                    ADH26779
                                                                                                                                                                                                                                                                                      ž S
                                                                                                                                                       셤
                                                                                                                         ð
```

DB 1; Length 20;

0.4%; Score 20;

Query Match

```
The invention relates to a compound targeted to a nucleic acid molecule encoding human phosphoinositide-3-kinase (PI3K) regulatory subunit 4, p150 The compound is an antisense oligonuclectide that specifically hybridises with a nucleic acid molecule encoding PI3K regulatory subunit 4, p150 and inhibits expression of the polypeptide. The antisense oligonuclectide comprises at least one modified internucleoside linkage i.e. a phosphorothioate linkage, at least one modified sugar moiety, preferably a 2'-O-methoxyethyl sugar moiety, or at least one modified nucleobase comprising the expression of P13K regulatory subunit 4, p150 and for preventing or treating hyperproliferative disorders and and for preventing or treating hyperproliferative disorders and metabolic disorders. These may also be used in research and diagnostics and in preventing or delaying infection or inflammation. This sequence represents a P13K regulatory subunit 4, p150 DNA antisense
                                  ö
                                  Gaps
                                                                                                                                                                                                                                                                                                                                       Human; phosphoinositide-3-kinase regulatory subunit 4; p150; P13K; P13 kinase; ds; antisense oligonucleotide; phosphorothioate linkage; 2'-O-methoxyethyl sugar molety; 5-methylcytosine; hyperproliferative disorder; cancer; Chediak-Higashi syndrome; neurodegenerative disorder; metabolic disorders; inflammation; cytostatic; immunomodulator; neurodegenerative; antimicrobial;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               New antisense oligonucleotides inhibiting the expression of phosphoinositide-3-kinase, regulatory subunit 4, p150, useful for preventing or treating diseases associated with the subunit, e.g. hyperproliferative disorders.
                                  ö
                                                                                                                                                                                                                                                                                                        Human PI3K regulatory subunit 4, p150 DNA target region #38.
                              0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Sequence 20 BP; 1 A; 6 C; 5 G; 8 T; 0 U; 0 Other;
             Pred. No. 1.4e+02;
Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Example 15; SEQ ID NO 126; 62pp; English.
                                                                  2131 CCAAATGGAAATTATGACAC 2150
100.0%; Pic
                                                                                         CCAAATGGAAATTATGACAC 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      31-MAY-2002; 2002US-00160786.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          31-MAY-2002; 2002US-00160786
                                                                                                                                                                                            ADH26791 standard; DNA; 20
                                                                                                                                                                                                                                                                      (first entry)
           Best Local Similarity 100.
Matches 20; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          (ISIS-) ISIS PHARM INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Freier SM, Dobie KW;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   WPI; 2004-051923/05.
                                                                                                                                                                                                                                                                                                                                                                                                                                                         antiinflammatory.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             US2003225013-A1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Homo sapiens
                                                                                                                                                                                                                                                                    11-MAR-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  04-DEC-2003.
                                                                                                                                                                                                                                  ADH26791;
                                                                                                                                                        RESULT 74
                                                                                                                                                                             ADH26793
                                                                                                 용
                                                                  ઠે
```

```
The invention relates to a compound targeted to a nucleic acid molecule encoding human phosphoinositide-3-kinase (PI3K) regulatory subunit 4, p150 The compound is an antisense oligonuclectide that specifically hybridises with a nucleic acid molecule encoding PI3K regulatory subunit 4, p150 and inhibits expression of the polypeptide. The antisense coligonuclectide comprises at least one modified internucleoside linkage i.e. a phosphorothioate linkage, at least one modified sugar moiety, preferably a 2'-O-methoxyethyl sugar moiety, or at least one modified in nucleobase comprising a 5-methylcytosine. The antisense compounds are useful for modulating the expression of PI3K regulatory subunit 4, p150 and for preventing or treating hyperproliferative disorders and cancer), Chediak-Higashi syndrome, neurodegenerative disorders and metabolic disorders. These may also be used in research and diagnostics and in preventing or delaying infection or infilammation. This sequence represents a PI3K regulatory subunit 4, p150 DNA antisense
                                                                                                                                                                                                                                                                                 Human, phosphoinositide-1-kinase regulatory subunit 4; p150; P13K; P13 kinase; ds; antisense oligonucleotide; phosphorothioate linkage; 2'-0-methoxyethyl sugar moiety; 5-methylcytosine; hyperproliferative disorder; cancer; Chedlak-Higashi syndrome; neurodegenerative disorder; metabolic disorders; inflammation;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Gapa
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             New antisense oligonucleotides inhibiting the expression of phosphoinositide-3-Kinase, regulatory subunit 4, p150, useful for preventing or treating diseases associated with the subunit, e.g. hyperproliferative disorders.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                .;
0
                                                                                                                                                                                                                                                                                                                                                                                          cytostatic, immunomodulator; neurodegenerative; antimicrobial;
                                                                                                                                                                                                                                             Human PI3K regulatory subunit 4, p150 DNA target region #40.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    0.4%; Score 20; DB 1; Length 20; 100.0%; Pred. No. 1.4e+02; ve 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Sequence 20 BP; 6 A; 6 C; 2 G; 6 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       oligonucleotide target region of the invention.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Example 15; SEQ ID NO 128; 62pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        3341 GTAGTACAATCTTACCATCC 3360
1 TCTGCTGGCATTTGTGTCCC 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1 GTAGTACAATCTTACCATCC 20
                                                                                                                         ADH26793 standard; DNA; 20 BP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    31-MAY-2002; 2002US-00160786.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          31-MAY-2002; 2002US-00160786.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             100.0%;
                                                                                                                                                                                                         11-MAR-2004 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Local Similarity 100.
hes 20; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             (ISIS-) ISIS PHARM INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Freier SM, Dobie KW;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         WPI; 2004-051923/05.
                                                                                                                                                                                                                                                                                                                                                                                                             antiinflammatory
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             US2003225013-A1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                       Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      04-DEC-2003
                                                                                                                                                                 ADH26793;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Matches
                       9
                                                                                                                                                                 ઠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             셤
```

20, Conservative

Local Similarity

Query Match Matches

ö

Gaps

ö

0, Indels

Score 20; DB 1; Length 20; Pred. No. 1.4e+02;

0.48;

ô

(first entry)

```
Human PI3K regulatory subunit 4, p150 DNA antisense oligonucleotide #67.
                                                                                                          Human; phosphoinositide-3-kinase regulatory subunit 4; pl50; pl3K; pl3 kinase; ss; antisense oligonucleotide; phosphorothioate linkage; 2'-O-methoxyethyl sugar moiety; 5-metholycycosine; hyperproliferative disorder; cancer; Chediak-Higashi syndrome; neurodegenerative disorder; metabolic disorders; inflammation; cytostatic; immunomodulator; neurodegenerative; antimicrobial;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 New antisense oligonucleotides inhibiting the expression of phosphoinositide-3-kinase, regulatory subunit 4, p150, useful for preventing or treating diseases associated with the subunit, e.g. hyperproliferative disorders.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Example 15; SEQ ID NO 77; 62pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       31-MAY-2002; 2002US-00160786.
                                                                                                                                                                                                                                                                                                                                                                                                                                  31-MAY-2002; 2002US-00160786
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     (ISIS-) ISIS PHARM INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          WPI; 2004-051923/05.
                                                                                                                                                                                                                                                         antiinflammatory.
                                                                                                                                                                                                                                                                                                                                                   US2003225013-A1.
                                                                                                                                                                                                                                                                                                       Homo sapiens.
                                       11-MAR-2004
                                                                                                                                                                                                                                                                                                                                                                                        04-DEC-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Freier SM,
ADH26742;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Matches
셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           The invention relates to a compound targeted to a nucleic acid molecule encoding human phosphoinositide 3-kinase (FI3K) regulatory subunit 4, p150. The compound is an antisense oligonucleotide that specifically hydridises with a nucleic acid molecule encoding PI3K regulatory subunit 4, p150 and inhibits expression of the polypebide. The antisense 4 p150 and inhibits expression of the polypebide. The antisense coligonucleotide comprises at least one modified internucleoside linkage i.e. a phosphorothibate linkage, at least one modified sugar moiety, preferably a 2'-0-methoxyethyl sugar moiety, or at least one modified nucleobase comprising the expression of P13K regulatory subunit 4, p150 and for preventing or treating hyperproliferative disorders and cancer). Chediak-Higashi syndrome, neurodegenerative disorders and cancer, cancer and in preventing or treating hyperproliferative disorders and modified in preventing or delaying infection or inflammation. This sequence represents a P13K regulatory subunit 4, p150 DNA antisense
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Gaps
                                                                                                                                                                                                                  Human; phosphoinositide-3-kinase regulatory subunit 4; p150; P13K; P13 kinase; ds; antisense oligonucleotide; phosphorothioate linkage; 2'-O-methoxyethyl sugar moiety; 5-methylcytosine; hyperproliferative disorder; cancer; Chediak-Higashi syndrome; neurodegenerative disorder; metabolic disorders; inflammation; cytostatic; immunomodulator; neurodegenerative; antimicrobial;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              New antisense oligonucleotides inhibiting the expression of phosphoinositide-3-kinase, regulatory subunit 4, p150, useful for preventing or treating diseases associated with the subunit, e.g. hyperproliferative disorders.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ö
                                                                                                                                                                             Human PI3K regulatory subunit 4, p150 DNA target region #45.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        0.4%; Score 20; DB 1; Length 20;
100.0%; Pred. No. 1.4e+02;
rative 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sequence 20 BP; 6 A; 3 C; 5 G; 6 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Example 15; SEQ ID NO 133; 62pp; English.
                                                     ADH26798 standard; DNA; 20 BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       31-MAY-2002; 2002US-00160786
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   31-MAY-2002; 2002US-00160786
                                                                                                                                               (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             (ISIS-) ISIS PHARM INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Freier SM, Dobie KW;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                WPI; 2004-051923/05.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                      antiinflammatory.
                                                                                                                                                                                                                                                                                                                                                                                                                                                         US2003225013-A1
                                                                                                                                                                                                                                                                                                                                                                                                                 Homo sapiens.
                                                                                                                                            11-MAR-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  04-DEC-2003
                                                                                                   ADH26798;
                                       ADH26798
```

Dobie KW;

```
The invention relates to a compound targeted to a nucleic acid molecule encoding human phosphoinositide-3-kinase (PI3K) regulatory subunit 4, encoding human phosphoinositide-3-kinase (PI3K) regulatory subunit 4, p150. The compound is an antisense oligonucleotide that specifically thy in the antisense at least one modified internucleoside linkage oligonucleotide comprises at least one modified internucleoside linkage oligonucleotide comprises at least one modified internucleoside linkage preferably a 2'-0-methoxyethyl sugar moiety, or at least one modified preferably a 2'-0-methoxyethyl sugar moiety, or at least one modified nucleobase comprising the expression of PI3K regulatory subunit 4, p150 and for preventing or treating hyperproliferative disorders (i.e. and for preventing or treating hyperproliferative disorders (i.e. and for preventing or treating hyperproliferative disorders and cancebolic disorders. These may also be used in research and diagnostics and in preventing or delaying infection or inflammation. This sequence and in prevents an antisense oligonucleotide of the invention.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Human PI3K regulatory subunit 4, p150 DNA target region #8.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          0.4%; Score 20; DB 1; Length 20; 00.0%; Pred. No. 1.4e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Sequence 20 BP; 6 A; 2 C; 7 G; 5 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Local Similarity 100.0%; Pred. No. 1.4 es 20; Conservative 0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 4258 CCACTITCTGAATTACAGCC 4277
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      20 CCACTTTCTGAATTACAGCC 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ₽.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ADH26761 standard; DNA; 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      11-MAR-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ADH26761;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               RESULT 78
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ADH26761
```

20; Conservative

Matches

8 셤 ADH26742 standard; DNA; 20 BP.

ADH26742,

```
RESULT 80
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ADH26703,
 ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             The invention relates to a compound targeted to a nucleic acid molecule encoding human phosphoinositide-3-kinase (PI3K) regulatory subunit 4, p150. The compound is an antisense oligonuclectide that specifically hybridises with a nucleic acid molecule encoding PI3K regulatory subunit 4, p150 and inhibits expression of the polypoptide. The antisense oligonuclectide comprises at least one modified internucleoside linkage
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Human PI3K regulatory subunit 4, p150 DNA antisense oligonucleotide #17.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    i.e. a phosphorothicate linkage, at least one modified sugar moterly, preferably a 2'-O-methoxyethyl sugar motery, or at least one modified nucleobase comprising a 5-methylcytosine. The antisense compounds are useful for modulating the expression of PI3K regulatory subunit 4, p150 and for preventing or treating hyperproliferative disorders (i.e. cancer), Chediak-Higashi syndrome, neurodegenerative disorders and metabolic disorders. These may also be used in research and diagnostics and in preventing or delaying infection or inflammation. This sequence represents a PI3K regulatory subunit 4, p150 DNA antisense oligomucleotide target region of the invention.
              Human; phosphoinositide-3-kinase regulatory subunit 4; p150; P13K; P13 kinase; ds; antisense oligonucleotide; phosphorothioate linkage; 2'-O-methoxyethyl sugar moiety; 5-methylcytosine; hyperproliferative disorder; cancer; Chediak-Higashi syndrome; neurodegenerative disorder; metabolic disorders; inflammation; cytostatic; immunomodulator; neurodegenerative; antimicrobial;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Gape
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Human; phosphoinositide-3-kinase regulatory subunit 4; p150; P13K; P13 kinase; ss; antisense oligonucleotide; phosphorothioate linkage; 2'-0-methoxyethyl sugar moiety; 5-methylcytosine;
                                                                                                                                                                                                                                                                                                                                                                                   New antisense oligonucleotides inhibiting the expression of phosphoinositide-3-kinase, regulatory subunit 4, p150, useful for preventing or treating diseases associated with the subunit, e.g. hyperproliferative disorders.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           0.4%; Score 20; DB 1; Length 20;
100.0%; Pred. No. 1.4e+02;
ve 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Sequence 20 BP; 8 A; 3 C; 7 G; 2 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Example 15; SEQ ID NO 96; 62pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         780 GGAGGAACTGAAAATCAGGC 799
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         GGAGGAACTGAAAATCAGGC 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Ouery Match
Best Local Similarity 100.0%; Pr
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ADH26692/C
ID ADH26692 standard; DNA; 20 BP
XX
AC ADH26692;
XX
XX
DT 11-MAR-2004 (first entry)
XX
DB Human PI3K regulatory subunit
XX
XX
XX
W Human; phosphoinositide-3-kin
XW Human; phosphoinositide-3-kin
XW Yukan; phosphoinositide-3-kin
XW Yukan; phosphoinositide-3-kin
XW Yukan; phosphoinositide-3-kin
XW Yukan; phosphoinositide-3-kin
XW 2'-0-methoxyethy] sugar moiet
                                                                                                                                                                                                                               31-MAY-2002; 2002US-00160786.
                                                                                                                                                                                                                                                             31-MAY-2002; 2002US-00160786,
                                                                                                                                                                                                                                                                                            (ISIS-) ISIS PHARM INC
                                                                                                                                                                                                                                                                                                                            Freier SM, Dobie KW;
                                                                                                                                                                                                                                                                                                                                                         WPI; 2004-051923/05.
                                                                                                          antiinflammatory.
                                                                                                                                                                   JS2003225013-A1
                                                                                                                                      Homo sapiens
                                                                                                                                                                                                  04-DEC-2003
g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ઠે
```

```
The invention relates to a compound targeted to a nucleic acid molecule encoding human phosphoinositide-3-kinase (PI3K) regulatory subunit 4, p150. The compound is an antisense oligonucleotide that specifically hybridises with a nucleic acid molecule encoding PI3K regulatory subunit 4, p150 and inhibits expression of the polypeptide. The antisense coligonucleotide comprises at least one modified internucleoside linkage i.e. a phosphorothioate linkage, at least one modified augar moiety, preferably a 2'-O-methoxyethyl sugar moiety, or at least one modified in uncleobase comprising a 5-methylcytosine. The antisense compounds are useful for modulating the expression of PI3K regulatory subunit 4, p150 and for preventing or treating hyperproliferative disorders and cancer), Chediak-Higashi syndrome, neurodegenerative disorders and metabolic disorders. These may also be used in research and diagnostics and in preventing or delaying infection or inflammation. This sequence represents an antisense oligonucleotide of the invention.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Human PI3K regulatory subunit 4, p150 DNA antisense oligonucleotide #28.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Gapa
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Human; phosphoinositide-3-kinase regulatory subunit 4; p150; P13K; P13 kinase; ss; antisense oligonucleotide; phosphorothioate linkage; 2'-O-methoxyethyl sugar moiety; 5-methylcytosine; hyperproliferative disorder; cancer; Chediak-Higashi syndrome; neurodegenerative disorder; metabolic disorders; inflammation; cytostatic; immunomodulator; neurodegenerative; antimicrobial;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                New antisense oligonucleotides inhibiting the expression of phosphoinositide-3-kinase, regulatory subunit 4, p150, useful for preventing or treating diseases associated with the subunit, e.g. hyperproliferative disorders.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ö
hyperproliferative disorder; cancer; Chediak-Higashi syndrome; neurodegenerative disorder; metabolic disorders; inflammation; cytostatic; immunomodulator; neurodegenerative; antimicrobial;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         0.4%; Score 20; DB 1; Length 20;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1.4e+02;
hes 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Sequence 20 BP; 5 A; 8 C; 3 G; 4 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  100.0%; Pred. No. 1.4
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Example 15; SEQ ID NO 27; 62pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1032 GGTCACCAGTTGGAATTGGG 1051
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        20 GGTCACCAGTTGGAATTGGG 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ADH26703 standard; DNA; 20 BP
                                                                                                                                                                                                                                                                                                                                                                                                                                        31-MAY-2002; 2002US-00160786.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   31-MAY-2002; 2002US-00160786
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               11-MAR-2004 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Query Match
Best Local Similarity 100.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 (ISIS-) ISIS PHARM INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Dobie KW;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          WPI; 2004-051923/05.
                                                                                                                   antiinflammatory.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       antiinflammatory
                                                                                                                                                                                                                                                                            US2003225013-A1.
                                                                                                                                                                                                 Homo sapiens
                                                                                                                                                                                                                                                                                                                                                      04-DEC-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Freier SM,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ADH26703;
```

ô

31-MAY-2002; 2002US-00160786.

```
The invention relates to a compound targeted to a nucleic acid molecule encoding human phosphoinositide-3-kinase (PI3K) regulatory subunit 4, p150 The compound is an antisense oligonucleotide that specifically the inventigues with a nucleic acid molecule encoding PI3K regulatory subunit 4, p150 and inhibits expression of the polypeptide. The antisense oligonucleotide comprises at least one modified internucleoside linkage i.e. a phosphorothioate linkage, at least one modified sugar moiety, preferably a 2'-0-methoxyethyl sugar moiety, or at least one modified nucleobase comprising the expression of PI3K regulatory subunit 4, p150 and for preventing the expression of PI3K regulatory subunit 4, p150 and for preventing or treating hyperproliferative disorders (i.e. cancer), checklak-Higashi syndrome, neurodegenerative disorders and end in preventing or delaying infection or inflammation. This sequence and in preventing or delaying infection or inflammation. This sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Human PI3K regulatory subunit 4, p150 DNA antisense oligonucleotide #40.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Human; phosphoinositide-3-kinase regulatory subunit 4; p150; P13K; p13 kinase; ss; antisense oligonucleotide; phosphorothioate linkage; 2'-0-methoxyethyl sugar moiety; 5-methoxyethylesine; hyperproliferative disorder; cancer; Chediak-Higashi syndrome; neurodegenerative disorder; metabolic disorders; inflammation; cytostatic; immunomodulator; neurodegenerative; antimicrobial;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Gaps
                                                                                                                                                                                                                                                                              New antisense oligonucleotides inhibiting the expression of phosphoinositide-3-kinase, regulatory subunit 4, p150, useful for preventing or treating diseases associated with the subunit, e.g. hyperproliferative disorders.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                .;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          0.4%; Score 20; DB 1; Length 20;
100.0%; Pred. No. 1.40+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Sequence 20 BP; 7 A; 1 C; 8 G; 4 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             100.0%; Pred. No. 1.4
                                                                                                                                                                                                                                                                                                                                                                            Example 15; SEQ ID NO 38; 62pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1529 ACACTTTTCTTCAGCCCTAC 1548
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          20 ACACTTTTCTTCAGCCCTAC 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ADH26715 standard; DNA; 20 BP.
                                                                                                                                      31-MAY-2002; 2002US-00160786.
                                                                                                     31-MAY-2002; 2002US-00160786
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         11-MAR-2004 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Query Match 0.4%
Best Local Similarity 100.0
Matches 20; Conservative
                                                                                                                                                                            (ISIS-) ISIS PHARM INC
                                                                                                                                                                                                                   Freier SM, Dobie KW;
                                                                                                                                                                                                                                                   WPI; 2004-051923/05.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           antiinflammatory
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  US2003225013-A1
                                  US2003225013-A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Homo sapiens
Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     04-DEC-2003
                                                                     04-DEC-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ADH26715;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               RESULT 81
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ADH26715
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       8
```

```
The invention relates to a compound targeted to a nucleic acid molecule encoding human phosphoinositide-1-kinase (PI3K) regulatory subunit 4, p150. The compound is an antisense oligonucleotide that specifically compound is an antisense oligonucleotide that specifically hybridises with a nucleic acid molecule encoding PI3K regulatory subunit 4, p150 and inhibits expression of the polypeptide. The antisense oligonucleotide comprises at least one modified internucleoside linkage i.e. a phosphorothicate linkage, at least one modified sugar moiety, i.e. a phosphorothicate linkage, at least one modified sugar moiety, preferably a 2'-O-methoxyethyl sugar moiety, or at least one modified nucleobase comprising a 5-methylcytosine. The antisense compounds are nucleobase comprising the expression of PI3K regulatory subunit 4, p150 and for preventing or treating hyperproliferative disorders (i.e. and for preventing or treating hyperproliferative disorders and metabolic disorders. These may also be used in research and diagnostics and in preventing or delaying infection or inflammation. This sequence and in preventing or allogonucleotide of the invention.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Human PI3K regulatory subunit 4, p150 DNA antisense oligonucleotide #41.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Human; phosphoinositide-3-kinase regulatory subunit 4; p150; p13K; p13 kinase; ss; antisense oligonucleotide; phosphorothioate linkage; 2'-O-methoxyethyl sugar moiety; 5-metholycycosine; hyperproliferative disorder; cancer; Chediak-Higashi syndrome; neurodegenerative disorder; metabolic disorders; inflammation; cytostatic; immunomodulator; neurodegenerative; antimicrobial;
                                                                                                                                                                                 New antisense oligonucleotides inhibiting the expression of phosphoinositide-3-kinase, regulatory subunit 4, p150, useful for preventing or treating diseases associated with the subunit, e.g. hyperproliferative disorders.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             0.4%; Score 20; DB 1; Length 20;
100.0%; Pred. No. 1.4e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Sequence 20 BP; 8 A; 2 C; 6 G; 4 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             100.0%; Pred. ...
                                                                                                                                                                                                                                                                                     Example 15; SEQ ID NO 50; 62pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            2555 TCCTGTGTCATCCCAATTTA 2574
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            20 rccrercrercarccaarrra 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ВÞ.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      31-MAY-2002; 2002US-00160786.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           31-MAY-2002; 2002US-00160786
                                             31-MAY-2002; 2002US-00160786.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ADH26716 standard; DNA; 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   11-MAR-2004 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Local Similarru,
nes 20; Conservative
                                                                                  (ISIS-) ISIS PHARM INC
                                                                                                                                                           WPI; 2004-051923/05.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              antiinflammatory.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   US2003225013-A1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        04-DEC-2003.
                                                                                                                          Freier SM,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ADH26716;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Aatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          RESULT 82
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ADH26716/
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    8
```

```
셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ö
                                                                                                                                                                                      The invention relates to a compound targeted to a nucleic acid molecule encoding human phosphoinostiide-3-kinase (P13K) regulatory subunit 4, p150. The compound is an antisense oligonucleotide that specifically hybridises with a nucleic acid molecule encoding P13K regulatory subunit 4, p150 and inhibits expression of the polypeptide. The antisense oligonucleotide comprises at least one modified internucleoside linkage i.e. a phosphorothicate linkage, at least one modified sugar moiety, or at least one modified nucleobase comprising a 5-methylytrosine. The antisense compounds are useful for modulating the expression of P13K regulatory subunit 4, p150 and for preventing or treating hyperproliferative disorders (i.e.
                                                                                                                                                                                                                                                                                                                                                         cancer), Chediak-Higashi syndrome, neurodegenerative disorders and metabolic disorders. These may also be used in research and diagnostics and in preventing or delaying infection or inflammation. This sequence represents an antisense oligonucleotide of the invention.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Human; phosphoinositide-3-kinase regulatory subunit 4; p150; P13K; P13 kinase; ds; antisense oligonucleotide; phosphorothioate linkage; 2'-O-methoxyethyl sugar moiety; 5-methylcytosine; hyperproliferative disorder; cancer; Chediak-Higashi syndrome; neurodegenerative disorder; metabolic disorders; inflammation; cytostatic; immunomodulator; neurodegenerative; antimicrobial;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Gaps
                                                                                   New antisense oligonucleotides inhibiting the expression of phosphoinositide-1-kinase, regulatory subunit 4, p150, useful for preventing or treating diseases associated with the subunit, e.g. hyperproliferative disorders.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Human PI3K regulatory subunit 4, p150 DNA target region #18.
                                                                                                                                                                                                                                                                                                                                                                                                                                                              0.4%; Score 20; DB 1; Length 20;
100.0%; Pred. No. 1.4e+02;
cive 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                   Sequence 20 BP; 6 A; 7 C; 4 G; 3 T; 0 U; 0 Other;
                                                                                                                                                               Example 15; SEQ ID NO 51; 62pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          2587 GGTGCCGTGGGATTTATCAC 2606
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GGTGCCGTGGGATTTATCAC 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ADH26771 standard; DNA; 20 BP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             31-MAY-2002; 2002US-00160786.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               31-MAY-2002; 2002US-00160786
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Local Similaring
(ISIS-) ISIS PHARM INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          (ISIS-) ISIS PHARM INC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Freier SM, Dobie KW;
                             Dobie KW;
                                                          WPI; 2004-051923/05.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   WPI; 2004-051923/05.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               cytostatic; immu
antiinflammatory
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    US2003225013-A1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           11-MAR-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   04-DEC-2003
                             Freier SM,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ADH26771;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Ношо
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   RESULT 83
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ADH26771
ID ADH
ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    8
```

```
The invention relates to a compound targeted to a nucleic acid molecule encoding human phosphoinositide-3-kinase (PI3K) regulatory subunit 4, p150. The compound is an antisense oligonucleotide that specifically hybridises with a nucleic acid molecule encoding PI3K regulatory subunit 6, p150 and inhibits expression of the polypeptide. The antisense conjouncleotide comprises at least one modified internucleoside linkage i.e. a phosphorothioate linkage, at least one modified sugar molety, preferably a 2'-O-methoxyethyl sugar molety, or at least one modified in nucleobase comprising a 5-methylcytosine. The antisense compounds are useful for modulating the expression of PI3K regulatory subunit 4, p150 and for preventing or treating hyperproliferative disorders and cancer), Chediak-Higashi syndrome, neurodegenerative disorders and metabolic disorders. These may also be used in research and disgnostics and in preventing or delaying infection or inflammation. This sequence represents a PI3K regulatory subunit 4, p150 DNA antisense
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Human, phosphoinositide-1-kinase regulatory subunit 4; p150; P11K; P13 kinase; ds; antisense oligonucleotide; phosphorothioate linkage; 2'-O-methoyethyl sugar moiety; 5-methylcytosine; hyperproliferative disorder; cancer; Chediak-Higashi syndrome; neurodegenerative disorder; metabolic disorders; inflammation;
New antisense oligonucleotides inhibiting the expression of phosphoinositide-3-kinase, regulatory subunit 4, p150, useful for preventing or treating diseases associated with the subunit, e.g.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 New antisense oligonucleotides inhibiting the expression of phosphoinositide-3-kinase, regulatory subunit 4, p150, useful for preventing or treating diseases associated with the subunit, e.g.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         cytostatic; immunomodulator; neurodegenerative; antimicrobial
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Human PI3K regulatory subunit 4, p150 DNA target region #42.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              0.4%; Score 20; DB 1; Length 20;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Sequence 20 BP; 8 A; 3 C; 4 G; 5 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1.4e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        oligonucleotide target region of the invention.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       100.0%; Pred. No. 1.4 cive 0; Mismatches
                                                                                                                                 Example 15; SEQ ID NO 106; 62pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1414 GATCACAGTATCAGAGAATT 1433
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      GATCACAGTATCAGAGAATT 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ADH26795 standard; DNA; 20 BP
                                                                             hyperproliferative disorders.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   31-MAY-2002; 2002US-00160786
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        31-MAY-2002; 2002US-00160786
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 11-MAR-2004 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                20, Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            (ISIS-) ISIS PHARM INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Dobie KW;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  WPI; 2004-051923/05.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Best Local Similarity
Matches 20; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    antiinflammatory
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          US2003225013-A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               04-DEC-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Freier SM,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ADH26795;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Query Match
```

```
The invention relates to a compound targeted to a nucleic acid molecule encoding human phosphoinositide-3-kinase (PI3K) regulatory subunit 4, p150. The compound is an antisense oligonucleotide that specifically hybridises with a nucleic acid molecule encoding PI3K regulatory subunit 4, p150 and inhibits expression of the polypeptide. The antisense oligonucleotide comprises at least one modified internucleoside linkage i.e. a phosphorothioate linkage, at least one modified sugar moiety, preferably a 2'-O-methoxyethyl sugar moiety, or at least one modified nucleobase comprising the expression of PI3K regulatory subunit 4, p150 and for preventing or treating hyperproliferative disorders and cancer), Chediak-Higashi syndrome, neurodegenerative disorders and metabolic disorders. These may also be used in research and diagnostics metabolic disorders. These may also be used in research and diagnostics metabolic disorders and in preventing or delaying infection or inflammation. This sequence represents a P13K regulatory subunit 4, p150 DNA antisense
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Human P13K regulatory subunit 4, p150 DNA antisense oligonucleotide #15.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Human; phosphoinositide-3-Kinase regulatory subunit 4; p150; P13K; p13 kinase; ss; antisense oligonucleotide; phosphorothioate linkage; 2'-O-methoxyethyl sugar moiety; 5-methoxyctosine; hyperproliferative disorder; cancer; Chediak-Higashi syndrome; neurodegenerative disorder; metabolic disorders; inflammation; cytostatic; immunomodulator; neurodegenerative; antimicrobial;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    New antisense oligonucleotides inhibiting the expression of phosphoinositide-3-kinase, regulatory subunit 4, p150, useful for preventing or treating diseases associated with the subunit, e.g. hyperproliferative disorders.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    0.4%; Score 20; DB 1; Length 20;
100.0%; Pred. No. 1.4e+02;
tive 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Sequence 20 BP; 7 A; 3 C; 6 G; 4 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Example 15; SEQ ID NO 25; 62pp; English.
                                           Example 15; SEQ ID NO 130; 62pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   3431 GCAATGCTGAGAGAATAGCT 3450
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1 GCAATGCTGAGAGAATAGCT 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ADH26690/c
ID ADH26690 standard; DNA; 20 BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         31-MAY-2002; 2002US-00160786.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         31-MAY-2002; 2002US-00160786.
hyperproliferative disorders.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Best Local Similarity 100.
Matches 20; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     (ISIS-) ISIS PHARM INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Dobie KW;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              WPI; 2004-051923/05.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             antiinflammatory..
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      US2003225013-A1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              11-MAR-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                04-DEC-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Freier SM,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ADH26690;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         RESULT 85
```

ð g

```
The invention relates to a compound targeted to a nucleic acid molecule encoding human phosphoinositide-3-kinase (PI3K) regulatory subunit 4, p150. The compound is an antisense oligonucleotide that specifically compound is an antisense oligonucleotide that specifically the inverse oligonucleotide. The antisense oligonucleotide captures at least one modified internucleoside linkage oligonucleotide comprises at least one modified internucleoside linkage i.e. a phosphorothioate linkage, at least one modified sugar moiety, i.e. a phosphorothioate linkage, at least one modified sugar moiety, or at least one modified preferably a 2'-O-methoxyethyl sugar moiety, or at least one modified on ucleobase comprising a 5-methylcytosine. The antisense compounds are underbose comprising the expression of p13K regulatory subunit 4, p150 and for preventing or treating hyperproliferative disorders (i.e. and for preventing or treating hyperproliferative disorders and cancer), chediack-Higashi syndrome, neurodegenerative disorders and mit is not in preventing or delaying infection or inflammation. This sequence and in preventing or aligonucleotide of the invention.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                The invention relates to a compound targeted to a nucleic acid molecule encoding human phosphoinositide-3-kinase (PI3K) regulatory subunit 4, p150. The compound is an antisense oligonucleotide that specifically hybridises with a nucleic acid molecule encoding PI3K regulatory subunit 4, p150 and inhibits expression of the polypeptide. The antisense
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Human PI3K regulatory subunit 4, p150 DNA antisense oligonucleotide #33.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Human; phosphoinositide-3-kinase regulatory subunit 4; pl50; Pl3K; pl3 kinase; ss; antisense oligonucleotide; phosphorothioate linkage; 2'-0-methoxyethyl sugar moiety; 5-methoxyethyl sugar sorder; hyperproliferative disorder; cancer; Chediak-Higashi syndrome; neurodegenerative disorder; metabolic disorders; inflammation; cytostatic; immunomodulator; neurodegenerative; antimicrobial;
                                                                                                                                                                                                                                                                                                                                                                                                                                  Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   New antisense oligonucleotides inhibiting the expression of phosphoinositide-3-kinase, regulatory subunit 4, p150, useful for preventing or treating diseases associated with the subunit, e.g.
                                                                                                                                                                                                                                                                                                                                                                                                                                  ;
0
                                                                                                                                                                                                                                                                                                                                                                                        DB 1; Length 20;
1.4e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                0; Indels
                                                                                                                                                                                                                                                                                                                                              Sequence 20 BP; 4 A; 5 C; 5 G; 6 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                          100.0%; Pred. .v.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Example 15; SEQ ID NO 43; 62pp; English.
                                                                                                                                                                                                                                                                                                                                                                                          0.4%; Score 20;
.00.0%; Pred. No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 982 GCACACAAATCTGGAGTTCG 1001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       20 gcacacaaarcresagrice 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        hyperproliferative disorders.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ADH26708 standard; DNA; 20 BP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       31-MAY-2002; 2002US-00160786.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               31-MAY-2002; 2002US-00160786.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  11-MAR-2004 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                     Local Similarity 100.
les 20; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  (ISIS-) ISIS PHARM INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Freier SM, Dobie KW;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      WPI; 2004-051923/05.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 antiinflammatory.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    US2003225013-A1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         04-DEC-2003.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ADH26708;
                                                                                                                                                                                                                                                                                                                                                                                                 Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            RESULT 86
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ADH26708/
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            $$$$$$$$$$$$$$$$$$$$
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           g
```

ó

```
;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          The invention relates to a compound targeted to a nucleic acid molecule encoding human phosphoinositide-3-kinase (PI3K) regulatory subunit 4, p150. The compound is an antisense oligonuclectide that specifically hybridises with a nucleic acid molecule encoding PI3K regulatory subunit 4, p150 and inhibits expression of the polypeptide. The antisense oligonuclectide comprises at least one modified internucleoside linkage i.e. a phosphorothicate linkage, at least one modified sugar moiety, preferably a 2'-O-methoxyethyl squar moiety, or at least one modified nucleobase comprising a 5-methylcytosine. The antisense compounds are useful for modulating the expression of PI3K regulatory subunit 4, p150
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Human PI3K regulatory subunit 4, p150 DNA antisense oligonucleotide #35.
                i.e. a phosphorothioate linkage, at least one modified sugar molety, preferably a 2'-O-methoxyethyl sugar molety, or at least one modified nucleobase comprising a 5-methylcytosine. The antiennes compounds are useful for modulating the expression of PilK regulatory subunit 4, piso and for preventing or treating hyperproliferative disorders (i.e. cancer), Chediak-Higashi syndrome, neurodegenerative disorders and metabolic disorders. These may also be used in research and diagnostics and in preventing or delaying infection or inflammation. This sequence represents an antisense oligonucleotide of the invention.
oligonucleotide comprises at least one modified internucleoside linkage
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Human; phosphoinositide-3-kinase regulatory subunit 4; p150; p13K; p13 kinase; se; antisense oligonucleotide; phosphorothioate linkage; 2'-O-methoxyethyl sugar moiety; 5-methylcytosine; hyperproliferative disorder; cancer; Chediak-Higashi syndrome; neurodegenerative disorder; metabolic disorders; inflammation; cytostatic; immunomodulator; neurodegenerative; antimicrobial;
                                                                                                                                                                                                                                                                                                           Gapa
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  New antisense oligonucleotides inhibiting the expression of phosphoinositide-3-kinase, regulatory subunit 4, p150, useful for preventing or treating diseases associated with the subunit, e.g.
                                                                                                                                                                                                                                                                                                         ö
                                                                                                                                                                                                                                                             Score 20; DB 1; Length 20;
Pred. No. 1.4e+02;
                                                                                                                                                                                                                                                                                                       0; Indels
                                                                                                                                                                                                                         Sequence 20 BP; 5 A; 3 C; 5 G; 7 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                            100.0%; Preα. ....
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Example 15; SEQ ID NO 45; 62pp; English.
                                                                                                                                                                                                                                                                                                                                               2005 CTAGCCTATGCTGAAACAT 2024
                                                                                                                                                                                                                                                                                                                                                                         CTAGCCTATGCTGAAAACAT 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ВР
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                hyperproliferative disorders.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                31-MAY-2002; 2002US-00160786
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      31-MAY-2002; 2002US-00160786
                                                                                                                                                                                                                                                                   0.48;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ADH26710 standard; DNA; 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           (first entry)
                                                                                                                                                                                                                                                                                Local Similation hes 20; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            (ISIS-) ISIS PHARM INC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Dobie KW;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            WPI; 2004-051923/05.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                antiinflammatory
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                US2003225013-A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Ното варіелв
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       11-MAR-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        04-DEC-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Freier SM,
                                                                                                                                                                                                                                                                                                                                                                                        20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ADH26710;
                                                                                                                                                                                                                                                                 Query Match
                                                                                                                                                                                                                                                                                                         Matches
888888888888888888
                                                                                                                                                                                                                                                                                                                                                                                   셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ઠે
```

```
The invention relates to a compound targeted to a nucleic acid molecule encoding human phosphoinositide-3-kinase (PI3K) regulatory subunit 4, promound is an antisense oligonuclectide that specifically hybridises with a nucleic acid molecule encoding PI3K regulatory subunit 4, p150 and inhibits expression of the polypeptide. The antisense coligonuclectide comprises at least one modified internucleoside linkage i.e. a phosphorothioate linkage at least one modified sugar motety, preferably a 2'-O-methoxyethyl sugar motety, or at least one modified or nucleobase comprising a 5-methylcytoshine. The antisense compounds are useful for modulating the expression of PI3K regulatory subunit 4, p150 and for preventing or treating hyperproliferative disorders and cancer), Chediak-Higashi syndrome, neurodegenerative disorders and metabolic disorders. These may also be used in research and diagnostics and in preventing or delaying infection or inflammation. This sequence represents an antisense oligonucleotide of the invention.
                                                                                                                                                                                                         ö
               cancer), Chediak-Higashi syndrome, neurodegenerative disorders and metabolic disorders. These may also be used in research and diagnostics and in preventing or delaying infection or inflammation. This sequence represents an antisense oligonucleotide of the invention.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Human PI3K regulatory subunit 4, p150 DNA antisense oligonucleotide #59
                                                                                                                                                                                                         Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Human; phosphoinositide-1-kinase regulatory subunit 4; p150; P13K; P13 Kinase; sp; antisense oligonucleocide; phosphorothioate linkage; b/3 kinase; sp; antisense oligonucleocide; phosphorothioate linkage; lyperproliferative disorder; cancer; Chediak-Higashi syndrome; neurodegenerative disorder; metabolic disorders; inflammation; cytostatic; immunomodulator; neurodegenerative; antimicrobial; antimicrobial;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              New antisense oligonucleotides inhibiting the expression of phosphoinositide-3-kinase, regulatory subunit 4, p150, useful for preventing or treating diseases associated with the subunit, e.g.
and for preventing or treating hyperproliferative disorders (1.e.
                                                                                                                                                                                                         ö
                                                                                                                                                             0.4%; Score 20; DB 1; Length 20; 100.0%; Pred. No. 1.4e+02; ative 0; Mismatches 0; Indels
                                                                                                                          Sequence 20 BP; 5 A; 3 C; 4 G; 8 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Example 15; SEQ ID NO 69; 62pp; English.
                                                                                                                                                                                                                                                   2080 CTTAATATGGAAAATGACCC 2099
                                                                                                                                                                                                                                                                           20 CTTAATATGGAAAATGACCC 1
                                                                                                                                                                                                                                                                                                                                                                                                   ВЪ.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                31-MAY-2002; 2002US-00160786.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                hyperproliferative disorders.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       31-MAY-2002; 2002US-00160786
                                                                                                                                                                                                                                                                                                                                                                         ADH26734/c
ID ADH26734 standard; DNA; 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    (first entry)
                                                                                                                                                                                                         20; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          (ISIS-) ISIS PHARM INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Freier SM, Dobie KW;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           WPI; 2004-051923/05.
                                                                                                                                                                  Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    US2003225013-A1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    11-MAR-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             04-DEC-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                             ADH26734;
                                                                                                                                                                                                           Matches
                                                                                                                                                                                                                                                                                                                                                            RESULT 88
                                                                                                                                                                                                                                                                                                                                                                                                                       88888888
                                                                                                                                                                                                                                                   ઠે
                                                                                                                                                                                                                                                                                        셤
```

Pred. No. 1.4e+02;

XX os

g ઠે

```
The invention relates to a compound targeted to a nucleic acid molecule encoding human phosphoinositide-3-kinase (PI3K) regulatory subunit 4, encoding human phosphoinositide-3-kinase (PI3K) regulatory subunit 4, p150. The compound is an antisense oliqonucleotide that specifically the profit of the polypeptide. The antisense 4, p150 and inhibits expression of the polypeptide. The antisense oligonucleotide comprises at least one modified internucleoside linkage i.e. a phosphorothicate linkage, at least one modified sugar moiety, or at least one modified preferably a 2'-0-methoxyethyl sugar moiety, or at least one modified necessary interpolation of P13K regulatory subunit 4, p150 useful for modulating the expression of P13K regulatory subunit 4, p150 useful for modulating the expression of P13K regulatory subunit 4, p150 metabolic disorders. These may also be used in research and diagnostics metabolic disorders. These may also be used in research and diagnostics metabolic disorders. The profection or inflammation. This sequence represents a P13K regulatory subunit 4, p150 DNA antisense
                                                                              ö
                                                                                                                                                                                                                                                                                                                                                                                                                Human; phosphoinositide-3-kinase regulatory subunit 4; p150; P13K; p13 kinase; ds; antisense oligonucleotide; phosphorothioate linkage; 2'-0-methoxyethyl sugar moiety; 5-methoxyetosine; hyperproliferative disorder; cancer; Chediak-Higashi syndrome; neurodegenerative disorder; metabolic disorders; inflammation; cytostatic; immunomodulator; neurodegenerative; antimicrobial;
                                                                              Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  New antisense oligonucleotides inhibiting the expression of phosphoinositide-3-kinase, regulatory subunit 4, p150, useful for preventing or treating diseases associated with the subunit, e.g.
                                                                              ö
                                                                                                                                                                                                                                                                                                                                                                              Human PI3K regulatory subunit 4, p150 DNA target region #4.
                                   0.4%; Score 20; DB 1; Length 20;
100.0%; Pred. No. 1.40+02;
tive 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Sequence 20 BP; 5 A; 6 C; 3 G; 6 T; 0 U; 0 Other;
Sequence 20 BP; 4 A; 5 C; 6 G; 5 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Example 15; SEQ ID NO 92; 62pp; English.
                                                                                                                        3781 GAGGCTTCTAAGCTGCCCAA 3800
                                                                                                                                                  20 GAGGCTTCTAAGCTGCCCAA 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     hyperproliferative disorders.
                                                                                                                                                                                                                                                                ADH26757 standard; DNA; 20 BP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             31-MAY-2002; 2002US-00160786.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         31-MAY-2002; 2002US-00160786
                                                                                                                                                                                                                                                                                                                                              (first entry)
                                              Query Match
Best Local Similarity 100.
Matches 20; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        (ISIS-) ISIS PHARM INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Dobie KW;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    WPI; 2004-051923/05.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   antiinflammatory.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 US2003225013-A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Homo sapiens
                                                                                                                                                                                                                                                                                                                                              11-MAR-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     04-DEC-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Freier SM,
                                                                                                                                                                                                                                                                                                        ADH26757;
                                                                                                                                                                                                                            RESULT 89
```

```
The invention relates to a compound targeted to a nucleic acid molecule encoding human phosphoinositide-3-kinase (PI3K) regulatory subunit 4, concoding human phosphoinositide-3-kinase (PI3K) regulatory subunit 4, p150. The compound is an antisense oligonucleotide that specifically controlled seasons at least one modified internucleoside linkage 4, p150 and inhibits expression of the polypeptide. The antisense coligonucleotide comprises at least one modified internucleoside linkage colisonate linkage, at least one modified sugar moiety, i.e. a phosphorothioate linkage, at least one modified sugar moiety, or at least one modified preferably a 2'-0-methoxyethy1 sugar moiety, or at least one modified controlleobase comprising the expression of p13K regulatory subunit 4, p150 custoff for preventing or treating hyperproliferative disorders and cand for preventing or treating hyperproliferative disorders and cand in preventing or delaying infection or inflammation. This sequence controlled the control control controlled the control contr
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           0
                             ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                         Human; phosphoinositide-3-kinase regulatory subunit 4; p150; P13K; P13 kinase; ds; antisense oligomucleotide; phosphorothioate linkage; 2-0-methoxyethyl sugar moiety; 5-methylcytosine; hypexproliferative disorder; cancer; Chediak-Higashi syndrome; neurodegenerative disorder; metabolic disorders; inflammation; cytostatic; immunomodulator; neurodegenerative; antimicrobial; antiinflammatoxy.
                               Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              New antisense oligonucleotides inhibiting the expression of phosphoinositide-3-kinase, regulatory subunit 4, p150, useful for preventing or treating diseases associated with the subunit, e.g. hyperproliferative disorders.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              6
                               ö
                                                                                                                                                                                                                                                                                                                                                                                                    Human PI3K regulatory subunit 4, p150 DNA target region #54.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           'Match 0.4%; Score 20; DB 1; Length 20; Local Similarity 100.0%; Pred. No. 1.4e+02; les 20; Conservative 0; Mismatches 0; Indels
                                  Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Sequence 20 BP; 4 A; 6 C; 4 G; 6 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  oligonucleotide target region of the invention.
                                  ö
                                     Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Example 15; SEQ ID NO 142; 62pp; English.
                                                                                       505
100.08; P1
                                                                                                                                      1 ccrcrcaaccarrirgacac 20
                                                                                       486 CCTCTGAACGATTTTGACAC
                                                                                                                                                                                                                                                                   BP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   31-MAY-2002; 2002US-00160786.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   31-MAY-2002; 2002US-00160786.
                                                                                                                                                                                                                                                                ADH26807 standard; DNA; 20
                                                                                                                                                                                                                                                                                                                                                                  (first entry)
                                       20; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  (ISIS-) ISIS PHARM INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Dobie KW;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    WPI; 2004-051923/05.
                     Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       US2003225013-A1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                    11-MAR-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      04-DEC-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Freier SM,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Query Match
                                                                                                                                                                                                                                                                                                                       ADH26807;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Best Loc
Matches
                                                  Matches
                                                                                                                                                                                                                        RESULT 90
                                                                                                                                                                                                                                                   ADH26807
                                                                                                                                                                                                                                                                                             셤
                                                                                                 ð
```

4424 CATCTGTGTCCTACTACAGG 4443

ð

Score 20; DB 1; Length 20;

0.48;

Query Match

(first entry)

용

```
Human PI3K regulatory subunit 4, p150 DNA antisense oligonucleotide #70.
                                                                                                                                          Human, phosphoinositide-3-kinase regulatory subunit 4, p150, P13K, P13 kinase; ss, antisense oligonucleotide; phosphorothioate linkage, 2'-O-methoxyethyl sugar moiety; 5-methyloyrosine, hyperproliferative disorder; cancer; Chediak-Higash syndrome; neurodegenerative disorder; metabolic disorder; inflammation; cytostatic; immunomodulator; neurodegenerative; antimicrobial;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  New antisense oligonucleotides inhibiting the expression of phosphoinositide-3-kinase, regulatory subunit 4, p150, useful for preventing or treating diseases associated with the subunit, e.g. hyperproliferative disorders.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Example 15; SEQ ID NO 80; 62pp; English.
                    ADH26745 standard; DNA; 20 BP.
                                                                                                                                                                                                                                                                                                                                                                          31-MAY-2002; 2002US-00160786.
                                                                                                                                                                                                                                                                                                                                                                                                          31-MAY-2002; 2002US-00160786
                                                                                                                                                                                                                                                                                                                                                                                                                                        (ISIS-) ISIS PHARM INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      WPI; 2004-051923/05.
                                                                                                                                                                                                                                             antiinflammatory.
                                                                                                                                                                                                                                                                                                           JS2003225013-A1
                                                                                                                                                                                                                                                                              Homo sapiens,
                                                                                 11-MAR-2004
                                                                                                                                                                                                                                                                                                                                          04-DEC-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Freier SM,
                                                  ADH26745;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Best Loca
Matches
     ADH26745/c
                     8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             The invention relates to a compound targeted to a nucleic acid molecule encoding human phosphoinositide-3-kinase (F13K) regulatory subunit 4, plso. The compound is an antisense oligonucleotide that specifically hybridises with a nucleic acid molecule encoding F13K regulatory subunit coligonucleotide comprises at least one modified internucleoside linkage (1 e. a phosphorothioate linkage at least one modified internucleoside linkage (1 e. a phosphorothioate linkage at least one modified sugar moiety, preferably a 2'-0-methoxyethyl sugar moiety, or at least one modified uncludated properting as methylcytosine. The antisense compounds are useful for modulating the expression of F13K regulatory subunit 4, plso and for preventing or treating hyperproliferative disorders and metabolic disorders. These may also be used in research and diagnostics and in preventing or delaying infection or inflammation. This sequence
                                                                                                                                                                                           Human PI3K regulatory subunit 4, p150 DNA antisense oligonucleotide #54.
                                                                                                                                                                                                                         Human; phosphoinositide-3-kinase regulatory subunit 4; p150; p13K; P13 kinase; ss; antisense oligonucleotide; phosphorothioate linkage; 2'-0-methoxyethyl sugar moiety; 5-methylcytosine; hyperprojiferative disorder; cancer; Chediak-Higashi syndrome; neurodegenerative disorder; metabolic disorders; inflammation;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             New antisense oligonucleotides inhibiting the expression of phosphoinositide-3-kinase, regulatory subunit 4, p150, useful for preventing or treating diseases associated with the subunit, e.g. hyperproliferative disorders.
                                                                                                                                                                                                                                                                                                           cytostatic; immunomodulator; neurodegenerative; antimicrobial; antiinflammatory.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       0.4%; Score 20; DB 1; Length 20;
100.0%; Pred. No. 1.4e+02;
ive 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             represents an antisense oligonucleotide of the invention.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Sequence 20 BP; 5 A; 7 C; 4 G; 4 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Example 15; SEQ ID NO 64; 62pp; English.
ADH26729 standard; DNA; 20 BP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       31-MAY-2002; 2002US-00160786.
                                                                                                                                                                                                                                                                                                                                                                                                                                                        31-MAY-2002; 2002US-00160786.
                                                                                                                                                             (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Query Match 0.4
Best Local Similarity 100.
Matches 20; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      (ISIS-) ISIS PHARM INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Freier SM, Dobie KW;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    WPI; 2004-051923/05.
                                                                                                                                                                                                                                                                                                                                                                                         US2003225013-A1
                                                                                                                                                                                                                                                                                                                                                           Homo sapiens
                                                                                                                                                              11-MAR-2004
                                                                                                                                                                                                                                                                                                                                                                                                                         04-DEC-2003
                                                                                                                              ADH26729;
```

Dobie KW;

```
ö
cancer), Chedlak-Higashi syndrome, neurodegenerative disorders and metabolic disorders. These may also be used in research and diagnostics and in preventing or delaying infection or inflammation. This sequence represents an antisense oligomucleotide of the invention.
                                                                                                                                                                                                                                                                                            Gaps
                                                                                                                                                                                                                                                                                            ô
                                                                                                                                                                                                                                                               0.4%; Score 20; DB 1; Length 20; 100.0%; Pred. No. 1.4e+02; Ve 0; Mismatches 0; Indels
                                                                                                                                                                                                                                    Sequence 20 BP; 6 A; 6 C; 1 G; 7 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                         4355 TGAAAATAAGGTTTTGGGAC 4374
                                                                                                                                                                                                                                                                                                                                                                                                                           H.
                                                                                                                                                                                                                                                                               100.08;
                                                                                                                                                                                                                                                                                                                                                                                                                           ADH26759 standard; DNA; 20
                                                                                                                                                                                                                                                                              Local Similarly ...
                                                                                                                                                                                                                                                                                                                                                                                                                                                        ADH26759
                                                                                                                                                                                                                                                                  Query Match
                                                                                                                                                                                                                                                                                                                                                                                             RESULT 93
                                                                                                                                                                                                                                                                                                                                                                                                           ADH26759
ID ADH2
XX
AC ADH2
XX
                                                                                                                                                                                                                                                                                                                                                  a
```

ö

0; Gaps

3504 GCGTCCTAAAGGGCTGTTAG 3523

8 음

GCGTCCTAAAGGCTGTTAG 1

20

RESULT 92

```
Freier SM,
                                                                                                                                                04-DEC-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ADH26784;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             RESULT 95
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ADH26784
a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ö
                                                                                                                                                                                                                                                                                                                                                                                                                                    The invention relates to a compound targeted to a nucleic acid molecule encoding human phosphoinositide-3-kinase (P13K) regulatory subunit 4, p150. The compound is an antisense eligenucleotide that specifically hybridises with a nucleic acid molecule encoding P18K regulatory subunit 4, p150 and inhibits expression of the polypeptide. The antisense oligonucleotide comprises at least one modified internucleoside linkage i.e. a phosphorothioate linkage, at least one modified sugar moiety, preferably a 2'-0-methoxyethyl sugar moiety, or at least compounds are useful for modulating the expression of P13K regulatory subunit 4, p150 and for preventing or treating hyperproliferative disorders (i.e. cancer), Chediak-Higashi syndrome, neurodegenerative disorders and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                cancer), Chediak-Higashi syndrome, neurouegemerative constitutions metabolic disorders. These may also be used in research and diagnostics and in preventing or delaying infection or inflammation. This sequence represents a PI3K regulatory subunit 4, p150 DNA antisense
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Gaps
                                             Human, phosphoinositide-3-kinase regulatory subunit 4; p150; P13K; P13 kinase, ds; antisense oligonucleotide; phosphorothioate linkage; 2'-O-methoxyethyl sugar molety; 5-methylcytosine; hyperproliferative disorder; cancer; Chediak-Higashi syndrome; neurodegenerative disorder; metabolic disorders; inflammation; cytostatic; immunomodulator; neurodegenerative; antimicrobial;
                                                                                                                                                                                                                                                                                                                                                             phosphoinositide-1-kinase, regulatory subunit 4, p150, useful for preventing or treating diseases associated with the subunit, e.g. hyperproliferative disorders.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ..
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Human PI3K regulatory subunit 4, p150 DNA target region #16.
                       Human PI3K regulatory subunit 4, p150 DNA target region #6.
                                                                                                                                                                                                                                                                                                                                                    New antisense oligonucleotides inhibiting the expression of
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Score 20; DB 1; Length 20;
Pred. No. 1.4e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Seguence 20 BP; 6 A; 4 C; 4 G; 6 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              oligonucleotide target region of the invention.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           0.4%; Sco...
100.0%; Pred. No. 1...
... 0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                  Example 15; SEQ ID NO 94; 62pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   559 CITGCCATTATGGGAAATCA 578
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CTTGCCATTATGGGAAATCA 20
                                                                                                                                                                                                                            31-MAY-2002; 2002US-00160786
                                                                                                                                                                                                                                                   31-MAY-2002; 2002US-00160786
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ADH26769 standard; DNA; 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         (first entry)
(first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Local Similarity 100.
nes 20; Conservative
                                                                                                                                                                                                                                                                            (ISIS-) ISIS PHARM INC
                                                                                                                                                                                                                                                                                                     Dobie KW;
                                                                                                                                                                                                                                                                                                                              WPI; 2004-051923/05.
                                                                                                                           antiinflammatory.
                                                                                                                                                                          US2003225013-A1
                                                                                                                                                    Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         11-MAR-2004
11-MAR-2004
                                                                                                                                                                                                   04-DEC-2003
                                                                                                                                                                                                                                                                                                     Freier SM,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Н
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ADH26769;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 RESULT 94
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ADH26769
 δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         XXXXXXXXX
```

```
The invention relates to a compound targeted to a nucleic acid molecule encoding human phosphoinositide-3-kinase (PI3K) regulatory subunit 4, p150 176 compound is an antisense oligonucleotide that specifically phycidises with a nucleic acid molecule encoding PI3K regulatory subunit 4, p150 and inhibits expression of the polypeptide. The antisense oligonucleotide comprises at least one modified internucleoside linkage i.e. a phosphorothioate linkage, at least one modified sugar moiety, preferably a 2'-O-methoxyethyl sugar moiety, or at least one modified nucleobase comprising a 5-methylcytosine. The antisense compounds are useful for modulating the expression of F13K regulatory subunit 4, p150 and for preventing or treating hyperproliferative disorders and metabolic disorders. These may also be used in research and diagnostics and in preventing or delaying infection or inflammation. This sequence represents a P13K regulatory subunit 4, p150 DNA antisense
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Human; phosphoinositide-3-kinase regulatory subunit 4; p150; P13K; P13 kinase; ds; antisense oligonuclectide; phosphorothioate linkage; 2'-0-methoxyethyl sugar moiety; 5-methylcytosine; hyperproliferative disorder; cancer; Chediak-Higashi syndrome;
Human, phosphoinositide-3-kinase regulatory subunit 4; p150; P13K; P13 kinase; ds; antisense oligonucleotide; phosphorothioate linkage; 2'-O-methoxyethyl sugar moiety; 5-methoxyetosine; hyperproliferative disorder; cancer; Chediak-Higashi syndrome; neurodegenerative disorder; metabolic disorders; inflammation; cytostatic; immunomodulator; neurodegenerative; antimicrobial;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                New antisense oligonucleotides inhibiting the expression of phosphoinositide-3-kinase, regulatory subunit 4, p150, useful for preventing or treating diseases associated with the subunit, e.g. hyperproliferative disorders.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Human PI3K regulatory subunit 4, p150 DNA target region #31.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Score 20; DB 1; Length 20;
Pred. No. 1.4e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Sequence 20 BP; 8 A; 2 C; 7 G; 3 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                100.0%; Pred. ...
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Example 15; SEQ ID NO 104; 62pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1268 AGTTGAAGAGAGCAATGGAC 1287
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1 AGTTGAAGAGAGCAATGGAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ADH26784 standard; DNA; 20 BP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               31-MAY-2002; 2002US-00160786.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          31-MAY-2002; 2002US-00160786.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           11-MAR-2004 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      (ISIS-) ISIS PHARM INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Dobie KW;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 WPI; 2004-051923/05.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Local Similarity
es 20; Conserv
                                                                                                                                                                                                                                          antiinflammatory
                                                                                                                                                                                                                                                                                                                                                                                                US2003225013-A1.
                                                                                                                                                                                                                                                                                                                         Homo sapiens
```

gibbs-10-667-022-4.rng

```
Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    97
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    RESULT
 ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           셤
                                                                                                                                                                                                                                                                                                                                                               The invention relates to a compound targeted to a nucleic acid molecule encoding human phosphoinositide-3-kinase (PI3K) regulatory subunit 4, p150 The compound is an antisense oligonucleotide that specifically charistises with a nucleic acid molecule encoding PI3K regulatory subunit 4, p150 and inhibits expression of the polypeptide. The antisense oligonucleotide comprises at least one modified internucleoside linkage i.e. a phosphorothioate linkage, at least one modified sugar moiety, preferably a 2'-O-methoxyethyl sugar moiety, or at least one modified nucleobase comprising the expression of F13K regulatory subunit 4, p150 useful for modulating the expression of F13K regulatory subunit 4, p150 cancer), Chediak-Higashi syndrome, neurodegenerative disorders and metabolic disorders. These may also be used in research and diagnostics mod in preventing or delaying infection or inflammation. This sequence represents a P13K regulatory subunit 4, p150 DNA antisense
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ô
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Human; phosphoinositide-3-kinase regulatory subunit 4; p150; P13K; P13 kinase; ds; antiense oligonucleotide; phosphorothioate linkage; 2'-0-methoxyethyl sugar moiety; 5-methylcytosine; hyperproliferative disorder; cancer; Chediak-Higashi syndrome; neurodegenerative disorder; metabolic disorders; inflammation;
                                                                                                                                                                                                                                                                     New antisense oligonucleotides inhibiting the expression of phosphoinositide-3-kinase, regulatory subunit 4, p150, useful for preventing or treating diseases associated with the subunit, e.g.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ö
            cytostatic; immunomodulator; neurodegenerative; antimicrobial; antinflammatory.
neurodegenerative disorder; metabolic disorders; inflammation;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  cytostatic; immunomodulator; neurodegenerative; antimicrobial;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Human PI3K regulatory subunit 4, p150 DNA target region #51.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  0.4%; Score 20; DB 1; Length 20;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Sequence 20 BP; 3 A; 4 C; 7 G; 6 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Pred. No. 1.4e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         100.0%; Pred. nc.
                                                                                                                                                                                                                                                                                                                                           Example 15; SEQ ID NO 119; 62pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      2587 GGTGCCGTGGGATTTATCAC 2606
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      GGTGCCGTGGGATTTATCAC 20
                                                                                                                                                                                                                                                                                                              hyperproliferative disorders.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ADH26804 standard; DNA; 20 BP
                                                                                                                                     31-MAY-2002; 2002US-00160786.
                                                                                                                                                             31-MAY-2002; 2002US-00160786
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Local Similarity 100.
Les 20; Conservative
                                                                                                                                                                                      (ISIS-) ISIS PHARM INC
                                                                                                                                                                                                                  Dobie KW;
                                                                                                                                                                                                                                             WPI; 2004-051923/05.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             antiinflammatory.
                                                                               US2003225013-A1
                                                       Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         11-MAR-2004
                                                                                                          04-DEC-2003.
                                                                                                                                                                                                                  Freier SM,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ADH26804;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              셤
```

```
The invention relates to a compound targeted to a nucleic acid molecule encoding human phosphoinositide-3-kinase (PI3K) regulatory subunit 4, p150 p150. The compound is an antisense oligonucleotide that specifically hybridises with a nucleic acid molecule encoding PI3K regulatory subunit 4, p150 and inhibits expression of the polypeptide. The antisense oligonucleotide comprises at least one modified. The antisense coligonucleotide comprises at least one modified sugar moiety, preferably a 2'-O-methoxyethyl sugar moiety, or at least one modified nucleobase comprising a 5-methylcytosine. The antisense compounds are useful for moditating the expression of PI3K regulatory subunit 4, p150 and for preventing or treating hyperproliferative disorders and metabolic disorders. These may also be used in research and diagnostics and in preventing or delaying infection or inflammation. This sequence represents a P13K regulatory subunit 4, p150 DNA antisense
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Human; phosphoinositide-3-kinase regulatory subunit 4; p150, P13K; P13 kinase; ds; antisense oligonucleotide; phosphorothioate linkage; 2'-O-methoxyethyl sugar moiety; 5-methylcytosine; hyperproliferative disorder; cancer; Chediak-Higashi syndrome; neurodegenerative disorder; metabolic disorder; inflammation; cytostatic; immunomodulator; neurodegenerative; antimicrobial;
                                                                                                                                                                                                                                                                                                                                                                                          New antisense oligonucleotides inhibiting the expression of phosphoinositide-3-kinase, regulatory subunit 4, p150, useful for preventing or treating diseases associated with the subunit, e.g.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Human PI3K regulatory subunit 4, p150 DNA target region #53.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   0.4%; Score 20; DB 1; Length 20;
100.0%; Pred. No. 1.4e+02;
ive 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Sequence 20 BP; 3 A; 4 C; 7 G; 6 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Example 15; SEQ ID NO 139; 62pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       4166 TGATTGCAGCTGTTCAGGGC 4185
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1 TGATTGCAGCTGTTCAGGGC 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ADH26806 standard; DNA; 20 BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 100.08;
                                                                                                              31-MAY-2002; 2002US-00160786
                                                                                                                                                                   31-MAY-2002; 2002US-00160786.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   hyperproliferative disorders.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          11-MAR-2004 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              20; Conservative
                                                                                                                                                                                                                            (ISIS-) ISIS PHARM INC.
                                                                                                                                                                                                                                                                                    Freier SM, Dobie KW;
                                                                                                                                                                                                                                                                                                                                          WPI; 2004-051923/05.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    antiinflammatory.
US2003225013-A1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   US2003225013-A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Homo sapiens
                                                        04-DEC-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ADH26806;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Best Loca
Matches
```

gibbs-10-667-022-4.rng

31-MAY-2002; 2002US-00160786.

```
g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                           The invention relates to a compound targeted to a nucleic acid molecule encoding human phosphoinositide-3-kinase (PI3K) regulatory subunit 4, p150. The compound is an antisense oligonucleotide that specifically hybridises with a nucleic acid molecule encoding PI3K regulatory subunit 4, p150 and inhibits expression of the polypeptide. The antisense oligonucleotide comparises at least one modified internucleoside linkage i.e. a phosphorothioate linkage, at least one modified sugar moiety, preferably a 2'-0-methoxyethyl sugar moiety, or at least one modified incompose comprising a 5-methylcytosine. The antisense compounds are useful for modulating the expression of PI3K regulatory subunit 4, p150 and for preventing or treating hyperproliferative disorders and metabolic disorders. These may also be used in research and diagnostics and in preventing or delaying infection or inflammation. This sequence represents a PI3K regulatory subunit 4, p150 DNA antisense
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Human; phosphoinositide-3-kinase regulatory subunit 4; p150; p13K; p13 kinase; ds; antisense oligonucleotide; phosphorothioate linkage; 2'-O-methoxyethyl sugar moiety; 5-methylcytosine; hyperproliferative disorder; cancer; Chediak-Higashi syndrome; neurodegenerative disorder; metabolic disorders; inflammation; cytostatic; immunomodulator; neurodegenerative; antimicrobial;
                                                                                                                                                                                                                                                                                               New antisense oligonucleotides inhibiting the expression of phosphoinostide-3-kinase, regulatory subunit 4, p150, useful for preventing or treating diseases associated with the subunit, e.g. hyperproliferative disorders.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Human PI3K regulatory subunit 4, p150 DNA target region #55.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         represents a P13K regulatory subunit 4, p150 DNA antisense oligonucleotide target region of the invention.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Query Match 0.4%; Score 20; DB 1; Length 20; Best Local Similarity 100.0%; Pred. No. 1.4e+02; Matches 20; Conservative 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Sequence 20 BP; 5 A; 2 C; 6 G; 7 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                    Example 15; SEQ ID NO 141; 62pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        4397 ATGTTGCAGGAAGTACT 4416
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1 ATGTTGCAGGAAGTACT 20
                                                 31-MAY-2002; 2002US-00160786.
                                                                                               31-MAY-2002; 2002US-00160786.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               31-MAY-2002; 2002US-00160786.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ADH26808 standard; DNA; 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 (first entry)
                                                                                                                                              (ISIS-) ISIS PHARM INC.
                                                                                                                                                                                               Dobie KW;
                                                                                                                                                                                                                                              WPI; 2004-051923/05.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     antiinflammatory.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               US2003225013-A1.
04-DEC-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   11-MAR-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Homo sapiens
                                                                                                                                                                                               Freier SM,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 04-DEC-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ADH26808;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  RESULT 98
ADH26808
```

셤

ઠે

```
The invention relates to a compound targeted to a nucleic acid molecule encoding human phosphoinositide-3-kinase (PI3K) regulatory subunit 4, plso form of the protectide that specifically hybridises with a nucleic acid molecule encoding PI3K regulatory subunit 4, plso and inhibits expression of the polypeptide. The antisense oligonuclectide comprises at least one modified internucleoside linkage oligonuclectide comprises at least one modified internucleoside linkage i.e. a phosphorothioate linkage, at least one modified sugar moiety, preferably a 2'-O-methoxyethyl sugar moiety, or at least one modified nucleobase comprising a 5-methylcytosine. The antisense compounds are useful for modulating the expression of F13K regulatory subunit 4, plso and for preventing or treating hyperproliferative disorders and metabolic disorders. These may also be used in research and diagnostics and in preventing or delaying infection or infilammation. This sequence represents a P13K regulatory subunit 4, plso DNA antisense cligonucleotide target region of the invention.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Human PI3K regulatory subunit 4, p150 DNA antisense oligonucleotide #9.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Human; phosphoinositide-3-kinase regulatory subunit 4; p150; p13K; p13 kinase; ss; antisense oligonucleotide; phosphorothioate linkage; 2'-O-methoxyethyl sugar moiety; 5-methylcytosine; hyperproliferative disorder; cancer; Chediak-Higashi syndrome; neurodegenerative disorder; metabolic disorders; inflammation; cytostatic; immunomodulator; neurodegenerative; antimicrobial;
                                                                                                                                                  New antisense oligonucleotides inhibiting the expression of bhosphoinositide-3-kinase, regulatory subunit 4, p150, useful for preventing or treating diseases associated with the subunit, e.g. hyperproliferative disorders.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        .
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 0.4%; Score 20; DB 1; Length 20; 100.0%; Pred. No. 1.4e+02; ive 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Sequence 20 BP; 8 A; 3 C; 4 G; 5 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                               Example 15; SEQ ID NO 143; 62pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      4633 GIGIGGAAAIAAAACCIACI 4652
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1 Greregaaraaaccracr
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    BP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       31-MAY-2002; 2002US-00160786.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         31-MAY-2002; 2002US-00160786.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Query Match
Best Local Similarity 100.v.
Thes 20; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ADH26684/c
ID ADH26684 standard; DNA; 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   11-MAR-2004 (first entry)
(ISIS-) ISIS PHARM INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           (ISIS-) ISIS PHARM INC.
                                                   Dobie KW;
                                                                                                 WPI; 2004-051923/05.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   antiinflammatory
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       US2003225013-A1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     04-DEC-2003.
                                                Freier SM,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ADH26684;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   RESULT 99
```

51

```
The invention relates to a compound targeted to a nucleic acid molecule encoding human phosphoinositide-3-kinase (FI3K) regulatory subunit 4, plso. The compound is an antisense oligonuclectide that specifically hybridises with a nucleic acid molecule encoding PI3K regulatory subunit 4, plso and inhibits expression of the polypeptide. The antisense oligonuclectide comprises at least one modified internucleoside linkage i.e. a phosphorothioate linkage at least one modified sugar moiety, preferably a 2'-O-methoxyethyl sugar moiety, or at least one modified concerning a 2'-methylcytosine. The antisense compounds are useful for modulating the expression of PI3K regulatory subunit 4, plso and for preventing or treating hyperproliferative disorders and cancer), Chediak-Higashi syndrome, neurodegenerative disorders and may also be used in research and diagnostics and in preventing or delaying infection or inflammation. This sequence represents an antisense oligonucleotide of the invention.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Human P13K regulatory subunit 4, p150 DNA antisense oligonucleotide #13.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Human; phosphoinositide-3-kinase regulatory subunit 4; p150; p13K; p13 kinase; ss; antisense oligonucleotide; phosphorothioate linkage; 2'-O-methoxyethyl sugar molety; 5-methylcytosine; hyperproliferative disorder; cancer; Chediak-Higashi syndrome; neurodegenerative disorder; metabolic disorders; inflammation; cytostatic; immunomodulator; neurodegenerative; antimicrobial; antiinflammatory.
                                                                      New antisense oligonucleotides inhibiting the expression of phosphoinositide-3-kinase, regulatory subunit 4, p150, useful for preventing or treating diseases associated with the subunit, e.g.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Score 20; DB 1; Length 20;
Pred. No. 1.4e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Sequence 20 BP; 5 A; 8 C; 4 G; 3 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               100.0%; Pred. No. 1.4 tive 0; Mismatches
                                                                                                                                                             Example 15; SEQ ID NO 19; 62pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        703 CGAGAAGGCCTGGTCGTTGT 722
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CGAGAAGGCCTGGTCGTTGT 1
                                                                                                                          hyperproliferative disorders.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ADH26688 standard; DNA; 20 BP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             31-MAY-2002; 2002US-00160786.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       31-MAY-2002; 2002US-00160786.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    20; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 (ISIS-) ISIS PHARM INC
 Dobie KW;
                                   WPI; 2004-051923/05.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         WPI; 2004-051923/05.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   US2003225013-A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           11-MAR-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     04-DEC-2003.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Freier SM,
 Freier SM,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ŝ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      셤
```

New antisense oligonucleotides inhibiting the expression of

```
The invention relates to a compound targeted to a nucleic acid molecule encoding human phosphoinositide-3-kinase (PI3K) regulatory subunit 4, p150. The compound is an antisense oligonucleotide that specifically hybridises with a nucleic acid molecule encoding PI3K regulatory subunit 4, p150 and inhibits expression of the polypeptide. The antisense coligonucleotide comprises at least one modified internucleoside linkage i.e. a phosphorothioate linkage, at least one modified sugar molety, preferably a 2'-O-methoxyethyl sugar molety, or at least one modified sucering comprising a 5-methylcytosine. The antisense compounds are useful for modulating the expression of PI3K regulatory subunit 4, p150 and for preventing or treating hyperproliferative disorders in cancer), Chediak-Higashi syndrome, neurodegenerative disorders and etabolic disorders. These may also be used in research and diagnostics and in preventing or delaying infection or inflammation. This sequence represents an antisense oligonucleotide of the invention.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Human PI3K regulatory subunit 4, p150 DNA antisense oligonucleotide #16
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Gape
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Human; phosphoinositide-3-kinase regulatory subunit 4; p150; P13K; P13 kinase; ss; antisense oligonucleotide; phosphorothioate linkage; 2'-O-methoxyethyl sugar molety; 5-methylcytosine; hyperproliferative disorder; cancer; Chediak-Higashi syndrome; neurodegenerative disorder; metabolic disorder; inflammation; cytostatic; immunomodulator; neurodegenerative; antimicrobial;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     New antisense oligonucleotides inhibiting the expression of phosphoinositide-3-kinase, regulatory subunit 4, p150, useful for preventing or treating diseases associated with the subunit, e.g. hyperproliferative disorders.
phosphoinositide-3-kinase, regulatory subunit 4, p150, useful for preventing or treating diseases associated with the subunit, e.g. hyperproliferative disorders.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Query Match 0.4%; Score 20; DB 1; Length 20; Best Local Similarity 100.0%; Pred. No. 1.4e+02; Matches 20; Conservative 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Sequence 20 BP; 4 A; 7 C; 3 G; 6 T; 0 U; 0 Other;
                                                                                     Example 15; SEQ ID NO 23; 62pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Example 15; SEQ ID NO 26; 62pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              875 GGCAGTATGTGCGAGACAAT 894
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              20 GGCAGTATGTGCGAGACAAT 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ВЪ.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           31-MAY-2002; 2002US-00160786.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  31-MAY-2002; 2002US-00160786
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ADH26691 standard; DNA; 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               11-MAR-2004 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   (ISIS-) ISIS PHARM INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Dobie KW;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  WPI; 2004-051923/05.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             antiinflammatory
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              US2003225013-A1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        04-DEC-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Freier SM,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ADH26691;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     RESULT 101
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ADH26691,
  ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   셤
```

```
The invention relates to a compound targeted to a nucleic acid molecule encoding human phosphoinositide-3-kinase (PI3K) regulatory subunit 4, plso momental an antisense oligonacleotide that specifically pyridises with a nucleic acid molecule encoding PI3K regulatory subunit 4, plso and inhibits expression of the polypeptide. The antisense oligonucleotide comprises at least one modified internucleoside linkage i.e. a phosphorothioate linkage, at least one modified sugar moiety, preferably a 2'-0-methoxyethyl sugar moiety, or at least one modified succession comprising a 5-methyloytosine. The antisense compounds are useful for modulating the expression of PI3K regulatory subunit 4, plso and for preventing or treating hyperproliferative disorders (i.e. cancer), Chediak-Higashi syndrome, neurodegenerative disorders and etabolic disorders. These may also be used in research and disagnostics and in preventing or delaying infection or inflammation. This sequence represents an antisense oligonucleotide of the invention.
                                                                                                                                                                                                                                                                                                                                               ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Human PI3K regulatory subunit 4, p150 DNA antisense oligonucleotide #18.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Human; phosphoinositide-3-kinase regulatory subunit 4; p150; p13K; p13 kinase; ss; antisense oligonucleotide; phosphorothioate linkage; 2'-O-methoxyethyl sugar molety; 5-methylcytcsine; hyperproliferative disorder; cancer; Chediak-Higashi syndrome; neurodegenerative disorder; metabolic disorders; inflammation; cytostatic; immunomodulator; neurodegenerative; antimicrobial; antiinflammatory.
                                                                                                                                                                                                                                                                                                                                                 Gaps
                                                                                                                                                                                                                                                                                                                                                 ٥;
                                                                                                                                                                                                                                                                                                            0.4%; Score 20; DB 1; Length 20; 100.0%; Pred. No. 1.4e+02; Live 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                               Sequence 20 BP; 5 A; 6 C; 4 G; 5 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                  TTCGTCATGGGGACATCAAG 1017
                                                                                                                                                                                                                                                                                                                                                                                                         TTCGTCATGGGGACATCAAG 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ВР
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            31-MAY-2002; 2002US-00160786.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            31-MAY-2002; 2002US-00160786
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ADH26693 standard; DNA; 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        (first entry)
                                                                                                                                                                                                                                                                                                                                 Local Similarity 100.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             (ISIS-) ISIS PHARM INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Dobie KW;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            US2003225013-A1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        11-MAR-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Freier SM,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            04-DEC-2003
                                                                                                                                                                                                                                                                                                                                                                                      866
                                                                                                                                                                                                                                                                                                                                                                                                                    20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ADH26693;
                                                                                                                                                                                                                                                                                                                   Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       RESULT 102
                                                                                                                                                                                                                                                                                                                                                    Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         8
                                                                                                                                                                                                                                                                                                                                                                                                                    g
*$$$$$$$$$$$$$$$$$
```

The invention relates to a compound targeted to a nucleic acid molecule encoding human phosphoinositide-3-kinase (P13K) regulatory subunit 4, p150. The compound is an antisense oligonucleotide that specifically hybridises with a nucleic acid molecule encoding P13K regulatory subunit

Example 15; SEQ ID NO 28; 62pp; English.

hyperproliferative disorders.

preventing

New antisense oligonucleotides inhibiting the expression of phosphoinositide-3-kinase, regulatory subunit 4, p150, useful for preventing or treating diseases associated with the subunit, e.g.

WPI; 2004-051923/05.

```
ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      The invention relates to a compound targeted to a nucleic acid molecule encoding human phosphoinositide-3-kinase (PI3K) regulatory subunit 4, p150. The compound is an antisense oligonuclectide that specifically hybridises with a nucleic acid molecule encoding PI3K regulatory subunit 4, p150 and inhibits expression of the polypeptide. The antisense oligonuclectide comprises at least one modified internucleoside linkage i.e. a phosphorothioate linkage, at least one modified sugar moiety, preferably a 2'-O-methoxyethyl sugar moiety, or at least compounds are nucleobase comprising a 5-methylcytosine. The antisense compounds are
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Human P13K regulatory subunit 4, p150 DNA antisense oligonucleotide #38.
4, p150 and inhibits expression of the polypeptide. The antisense oligonuclectide comprises at least one modified internucleoside linkage i.e. a phosphorothicate linkage, at least one modified sugar moiety, preferably a 2-O-methoxyethyl sugar moiety, or at least one modified nucleobase comprising a 5-methylcytosine. The antisense compounds are useful for modulating the expression of P13K regulatory subunit 4, p150 and for preventing or treating hyperproliferative disorders (i.e.
                                                                                                                                       cancer), Chediak-Higashi syndrome, neurodegenerative disorders and metabolic disorders. These may also be used in research and diagnostics and in preventing or delaying infection or inflammation. This sequence
                                                                                                                                                                                                                                                                                                                   Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Human, phosphoinositide-3-kinase regulatory subunit 4; p150; p13K; p13 kinase; ss; antisense oligonucleotide; phosphorothioate linkage; 2'-0-methoxyethyl sugar moiety; 5-methoxyetosine; hyperproliferative disorder; cancer; Chediak-Higashi syndrome; neurodegenerative disorder; metabolic disorders; inflammation; cytostatic; immunomodulator; neurodegenerative; antimicrobial;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 New antisense oligonucleotides inhibiting the expression of phosphoinositide-3-kinase, regulatory subunit 4, p150, useful for preventing or treating diseases associated with the subunit, e.g. hyperproliferative disorders.
                                                                                                                                                                                                                                                                                                                   ö
                                                                                                                                                                                                  represents an antisense oligonucleotide of the invention.
                                                                                                                                                                                                                                                                              0.4%; Score 20; DB 1; Length 20;
                                                                                                                                                                                                                                                                                                                 0; Indels
                                                                                                                                                                                                                                       Sequence 20 BP; 5 A; 2 C; 6 G; 7 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                  1.4e+02;
                                                                                                                                                                                                                                                                                                    100.0%; Pred. No. 1.4 
tive 0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Example 15; SEQ ID NO 48; 62pp; English.
                                                                                                                                                                                                                                                                                                                                                              1083 CACTTATCTTCCAGAGACA 1102
                                                                                                                                                                                                                                                                                                                                                                                  CACTTATCTTCCAGAAGACA 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 BP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               31-MAY-2002; 2002US-00160786.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      31-MAY-2002; 2002US-00160786.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ADH26713 standard; DNA; 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             (first entry)
                                                                                                                                                                                                                                                                        Query Match
Best Local Similarity 100.'
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          (ISIS-) ISIS PHARM INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Dobie KW;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      WPI; 2004-051923/05.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               antiinflammatory.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       US2003225013-A1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Homo sapiens,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               11-MAR-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            04-DEC-2003.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Freier SM,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ADH26713;
                                                                                                                                                                                                                                                                                                                                                                                                     20
                                                                                                                                                                                                                                                                                                                                                                                                                                                              RESULT 103
ADH26713/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       셤
              ð
```

represents an antisense oligonucleotide of the invention.

ö

```
useful for modulating the expression of P13K regulatory subunit 4, p150 and for preventing or treating hyperproliferative disorders (i.e. cancer), Chedlak-Higabahi syndrome, neurodegenerative disorders and metabolic disorders. These may also be used in research and disgnostics and in preventing or delaying infection or inflammation. This sequence represents an antisense oligonucleotide of the invention.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Human PI3K regulatory subunit 4, p150 DNA antisense oligonucleotide #49.
                                                                                                                                                                                                                                                                                                                                                                     Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Human; phosphoinositide-3-kinase regulatory subunit 4; p150; p13K; p13 kinase; s8; antisense oligonucleocide; phosphorothioate linkage; 2-0-methoxyethyl sugar moiety; 5-methylcytcosine; hyperproliferative disorder; cancer; Chediak-Higashi syndrome; neurodegenerative disorder; metabolic disorders; inflammation; cytostatic; immunomodulator; neurodegenerative; inflammation; antimicrobial; antimicrobial;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              New antisense oligonucleotides inhibiting the expression of phosphoinositide. 3-kinase, regulatory subunit 4, p150, useful for preventing or treating diseases associated with the subunit, e.g. hyperproliferative disorders.
                                                                                                                                                                                                                                                                                                                                                                     ö
                                                                                                                                                                                                                                                                                                  0.4%; Score 20; DB 1; Length 20; 100.0%; Pred. No. 1.4e+02;
                                                                                                                                                                                                                                                                                                                                                                  0; Indels
                                                                                                                                                                                                                              Sequence 20 BP; 8 A; 6 C; 1 G; 5 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                               100.0%; Pred. ...
                                                                                                                                                                                                                                                                                                                                                                                                                                  2438 TTAGTGATGCTGAGGAATTT 2457
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       20 TTAGTGATGCTGAGGAATTT 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ADH26724 standard; DNA; 20 BP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 31-MAY-2002; 2002US-00160786.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 31-MAY-2002; 2002US-00160786.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          (first entry)
                                                                                                                                                                                                                                                                                                                             Local Similarity 100.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 (ISIS-) ISIS PHARM INC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Freier SM, Dobie KW;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              WPI; 2004-051923/05.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    US2003225013-A1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          11-MAR-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    04-DEC-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ADH26724;
                                                                                                                                                                                                                                                                                                  Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   RESULT 104
ADH26774/C
ID ADH2677
XX
AAC ADH267
XX
DT 11-MAR
XX
DT 11-MAR
XX
HUMAN,
XW
P13 Xi
XW
P13 Xi
XW
ADH267
XW
P13 Xi
XW
ADH267
XW
P13 Xi
XW
ADH267
XW
ADH267
XW
ADH267
XW
ADH267
XW
ADH267
XX
ADH267
XX
ADH267
XX
ADH267
XX
ADH267
XX
ADH267
XX
ADH267
A
                                                                                                                                                                                                                                                                                                                                                                  Matches
      8888888888
                                                                                                                                                                                                                                                                                                                                                                                                                                  ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        셤
```

```
ô
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            The invention relates to a compound targeted to a nucleic acid molecule encoding human phosphoinostide-3-kinase (PI3K) regulatory subunit 4, p150. The compound is an antisense oligonuclectide that specifically hybridses with a nucleic acid molecule encoding PI3K regulatory subunit 4, p150 and inhibits expression of the polypeptide. The antisense oligonuclectide comprises at least one modified internucleoside linkage i.e. a phosphorothioate linkage, at least one modified sugar moiety, preferably a 2-0-methoxyethyl sugar moiety, or at least one modified nucleobase comprising a 5-methylcytosine. The antisense compounds are useful for modulating the expression of PI3K regulatory subunit 4, p150 and for preventing or treating hyperproliferative disorders (i.e. cancer). Chediak-Higashi syndrome, neurodegenerative disorders and metabolic disorders. These may also be used in research and diagnostics and in preventing or delaying infection or inflammation. This sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Human PI3K regulatory subunit 4, p150 DNA antisense oligonucleotide #55.
                                                                                                                                                Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Human; phosphoinositide-3-kinase regulatory subunit 4; p150; P13K; P13 kinase; ss; antisense oligonucleotide; phosphorothioate linkage; 2'-0-methoxyethyl sugar moiety; 5-methylcytosine; hyperproliferative disorder; cancer; Chediak-Higashi syndrome; neurodegenerative disorder; metabolic disorders; inflammation; cytostatic; immunomodulator; neurodegenerative; antimicrobial;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     New antiaense oligonucleotides inhibiting the expression of phosphoinositide-3-kinase, regulatory subunit 4, p150, useful for preventing or treating diseases associated with the subunit, e.g.
                                                                                                                                             ö
                                                                                               Length 20;
                                                                                                                                             0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      represents an antisense oligonucleotide of the invention
                                              Sequence 20 BP; 5 A; 3 C; 4 G; 8 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Sequence 20 BP; 6 A; 4 C; 6 G; 4 T; 0 U; 0 Other;
                                                                                                                      1.46+02;
                                                                                            0.4%; Score 20; DB 100.0%; Pred. No. 1.4 cive 0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Example 15; SEQ ID NO 65; 62pp; English.
                                                                                                                                                                                              3318 AAAACCAGTAATACCGGTTT 3337
                                                                                                                                                                                                                        20 AAAACCAGTAATACCGGTTT 1
                                                                                                                                                                                                                                                                                                                                                                      ADH26730 standard; DNA; 20 BP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                hyperproliferative disorders.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       31-MAY-2002; 2002US-00160786.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        31-MAY-2002; 2002US-00160786.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      11-MAR-2004 (first entry)
                                                                                          Query Match 0.4
Best Local Similarity 100.
Matches 20; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         (ISIS-) ISIS PHARM INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Dobie KW;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         WPI; 2004-051923/05.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           antiinflammatory.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        US2003225013-A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         04-DEC-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Freier SM,
                                                                                                                                                                                                                                                                                                                                                                                                                     ADH26730;
                                                                                                                                                                                                                                                                                                                        RESULT 105
                                                                                                                                                                                                                                                                                                                                                  ADH26730/
SXS
                                                                                                                                                                                                                                                                                                                                                                         ઠ
                                                                                                                                                                                                                                          셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   The invention relates to a compound targeted to a nucleic acid molecule encoding human phosphoinositide-3-kinaee (PINK) regulatory subunit 4, p150. The compound is an antisense oligonucleotide that specifically byiddsee with a nucleic acid molecule encoding PINK regulatory subunit 4, p150. The compound is an acidet acid molecule encoding PINK regulatory subunit 4, p150 and inhibits expression of the polypeptide. The antisense coligonucleotide comprises at least one modified internucleoside linkage i.e. a phosphorothioate linkage, at least one modified sugar moiety, preferably a 2'-O-methoxyethyl sugar moiety, or at least compounds are useful for modulating the expression of PINK regulatory subunit 4, p150 and for preventing or treating hyperproliferative disorders and cancer), Chediak-Higashi syndrome, neurodegenerative disorders and metabolic disorders. These may also be used in research and diagnostics and in preventing or delaying infection or inflammation. This sequence
```

0.4%; Score 20; DB 1; Length 20;

Query Match

Example 15; SEQ ID NO 59; 62pp; English.

20 CTGACTAAATGACACCCAAA 1

Š 셤

```
RESULT 107
                                                                         ADH26758
                                                                                           용
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      The invention relates to a compound targeted to a nucleic acid molecule encoding human phosphoinositide-3-kinase (PI3K) regulatory subunit 4, encoding human phosphoinositide-3-kinase (PI3K) regulatory subunit 4, pl50 pl50. The compound is an antisense olisyonucleotide that specifically the public sexion of the polypeptide. The antisense olisyonucleotide comprises at least one modified internucleoside linkage i.e. a phosphorothioate linkage, at least one modified sugar moiety, preferably a 2'-O-methoxyethyl sugar moiety, or at least one modified nucleobase comprising a 5-methylcytosine. The antisense compounds are nucleobase comprising a benethylcytosine. The antisense compounds are nucleobase comprising the expression of PI3K regulatory subunit 4, pl50 and for preventing or treating hyperproliferative disorders (i.e. cancer), Chediak-Higashi syndrome, neurodegenerative disorders and and in preventing or delaying infection or inflammation. This sequence represents an antisense oligonucleotide of the invention.
                   ö
                                                                                                                                                                                                                                                                                                Human P13K regulatory subunit 4, p150 DNA antisense oligonucleotide #76.
                   Gaps
                                                                                                                                                                                                                                                                                                                                Human; phosphoinositide-3-kinase regulatory subunit 4; p150; p13K;
P13 kinase; ss; antisense oligonucleotide; phosphorothioate linkage;
2'-0-methoxyethyl sugar moiety; 5-methylcytosine;
hyperproliferative disorder; cancer; Chediak-Higashi syndrome;
neurodegenerative disorder; metabolic disorders; inflammation;
cytostatic; immunomodulator; neurodegenerative; antimicrobial;
antiinflammatory.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             New antisense oligonucleotides inhibiting the expression of phosphoinositide-3-kinase, regulatory subunit 4, p150, useful for preventing or treating diseases associated with the subunit, e.g.
                   ö
                     Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sequence 20 BP; 3 A; 2 C; 6 G; 9 T; 0 U; 0 Other;
 100.0%; Pred. No. 1.4e+02; ive 0; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Example 15; SEQ ID NO 86; 62pp; English.
                                                           3523 GTTGCCCATCTTCATGAGCA 3542
                                                                               20 GTTGCCCATCTTCATGAGCA 1
                         ..
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         preventing or treating disease hyperproliferative disorders.
                                                                                                                                                                                            ADH26751 standard; DNA; 20 BP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 31-MAY-2002; 2002US-00160786.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               31-MAY-2002; 2002US-00160786
                                                                                                                                                                                                                                                                       (first entry)
                       Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       (ISIS-) ISIS PHARM INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Freier SM, Dobie KW;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                WPI; 2004-051923/05.
     Best Local Similarity
Matches 20; Conser
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        US2003225013-A1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Homo sapiens,
                                                                                                                                                                                                                                                                       11-MAR-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          04-DEC-2003
                                                                                                                                                                                                                                   ADH26751;
                                                                                                                                                          RESULT 106
                                                                                                                                                                                ADH26751,
```

```
The invention relates to a compound targeted to a nucleic acid molecule encoding human phosphoinostiide-3-kinase (PI3K) regulatory subunit 4, concoding human phosphoinostiide-3-kinase (PI3K) regulatory subunit 4, p150. The compound is an antisense oligonucleotide that specifically considers with a nucleic acid molecule encoding PI3K regulatory subunit 4, p150 and inhibits expression of the polypeptide. The antisense conjouncleotide comprises at least one modified internucleoside linkage ci.e. a phosphorothibate linkage, at least one modified sugar moiety, or at least one modified considerably a 2'-0-methoxyethyl sugar moiety, or at least one modified cuerty, or at least one modified cuerty, or at least one modified cuerty preferably a 2'-0-methoxyethyl sugar moiety, or at least one modified cuerty or redulating the expression of F13K regulatory subunit 4, p150 cancer), chediak-Higashi syndrome, neurodegenerative disorders and cancer) crepresents a Flase may also be used in research and diagnostics and in preventing or delaying infection or inflammation. This sequence conjugonucleotide target region of the invention.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Gaps
                                                                                                                                                                                                                                                                                                              Human, phosphoinositide-3-kinase regulatory subunit 4; p150; P13K; p13 kinase; ds; antisense oligonucleotide; phosphorothioate linkage; 2'-O-methoxyethyl sugar moiety; 5-methoxyethyl syndrome; hyperproliferative disorder; cancer; Chediak-Higashi syndrome; neurodegenerative disorder; metabolic disorder; inflammation; cytostatic; immunomodulator; neurodegenerative; antimicrobial;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              New antisense oligonucleotides inhibiting the expression of phosphoinositide-3-kinase, regulatory subunit 4, p150, useful for preventing or treating diseases associated with the subunit, e.g. hyperproliferative disorders.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     .
0
                                                                                                                                                                                                                                Human PI3K regulatory subunit 4, p150 DNA target region #5.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 0.4%; Score 20; DB 1; Length 20;
100.0%; Pred. No. 1.4e+02;
tive 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sequence 20 BP; 9 A; 6 C; 2 G; 3 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Example 15; SEQ ID NO 93; 62pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           534 AACCTTACTAAAGACCACAG 553
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1 AACCTTACTAAAGACCACAG 20
BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         31-MAY-2002; 2002US-00160786.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           31-MAY-2002; 2002US-00160786.
ADH26758 standard; DNA; 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Best Local Similarity 100.
Matches 20; Conservative
                                                                                                                                                                   (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       (ISIS-) ISIS PHARM INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Dobie KW;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           WPI; 2004-051923/05.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         antiinflammatory.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    US2003225013-A1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  04-DEC-2003.
                                                                                                                                                                   11-MAR-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Freier SM,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Query Match
                                                                                          ADH26758;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ð
```

ö

Gaps

; 0

0; Indels

0.4%; Score 20; DB 1; Length 20; 100.0%; Pred. No. 1.4e+02;

100.0%; Prec. ...

Query Match 0.45 Best Local Similarity 100.0 Matches 20; Conservative

(first entry)

```
Human, phosphoinositide-3-kinase regulatory subunit 4; p150; p13K; P13 kinase; ds; antisense oligonucleotide; phosphorothioate linkage; 2'-O-methoxyethyl sugar moiety; 5-methyloyrosine; hyperproliferative disorder; cancer; Chediak-Higashi syndrome; neurodegenerative disorder; metabolic disorders; inflammation; cytostatic; immunomodulator; neurodegenerative; antimicrobial;
                                                                                   Human PI3K regulatory subunit 4, p150 DNA target region #13.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       31-MAY-2002; 2002US-00160786.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          31-MAY-2002; 2002US-00160786
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               (ISIS-) ISIS PHARM INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       WPI; 2004-051923/05.
                                                                                                                                                                                                                                                                                                   antiinflammatory.
                                                                                                                                                                                                                                                                                                                                                                                                             US2003225013-A1.
                                                                                                                                                                                                                                                                                                                                                           Homo sapiens
                              11-MAR-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  04-DEC-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Freier SM,
     The invention relates to a compound targeted to a nucleic acid molecule encoding human phosphoinositide-3-kinase (P13K) regulatory subunit 4, p150. The compound is an antisense oligomucleotide that specifically hybridises with a nucleic acid molecule encoding P13K regulatory subunit 4, p150 and inhibits expression of the polypeptide. The antisense oligomucleotide comprises at least one modified internucleoside linkage i.e. a phosphorothicate linkage, at least one modified sugar moiety, preferably a 2'-O-methoxyethyl sugar moiety, or at least one modified nucleobase comprising a 5-methylcytosine. The antisense compounds are useful for modulating the expression of P13K regulatory subunit 4, p150 and for preventing or treating hyperproliferative disorders (i.e. cancer), Chediak-Higaghi syndrome, neurodegenerative disorders and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   metabolic disorders. These may also be used in research and diagnostics and in preventing or delaying infection or inflammation. This sequence represents a PI3K regulatory subunit 4, p150 DNA antisense oligonucleotide target region of the invention.
                                                                                                                                                                                                                                  Human; phosphoinositide-3-kinase regulatory subunit 4; p150; p13K; p13 kinase; ds; antisense oligonucleotide; phosphorothioate linkage; 2'-0-methoxyethyl sugar moiety; 5-methylcytosine; hyperproliferative disorder; cancer; Chediak-Higashi syndrome; neurodegenerative disorder; metabolic disorders; inflammation; cytostatic; immunomodulator; neurodegenerative; antimicrobial; antiliflammatory.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 New antisense oligonucleotides inhibiting the expression of phosphoinositide-3-kinase, regulatory subunit 4, p150, useful for preventing or treating diseases associated with the subunit, e.g.
                                                                                                                                                                                           Human PI3K regulatory subunit 4, p150 DNA target region #9.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Score 20; DB 1; Length 20;
Pred. No. 1.4e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Sequence 20 BP; 8 A; 5 C; 3 G; 4 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           0.4%; Scc...
100.0%; Pred. No....
0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Example 15; SEQ ID NO 97; 62pp; English.
                           ADH26762 standard; DNA; 20 BP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     hyperproliferative disorders.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               31-MAY-2002; 2002US-00160786.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 31-MAY-2002; 2002US-00160786
                                                                                                                                   (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    (ISIS-) ISIS PHARM INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              WPI; 2004-051923/05.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     JS2003225013-A1
                                                                                                                                      11-MAR-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          04-DEC-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Freier SM,
                                                                                 ADH26762;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Query Match
Best Local 8
ADH26762

ADH26762

ADH2

ADH3

ADH3
```

Dobie KW;

```
The invention relates to a compound targeted to a nucleic acid molecule encoding human phosphoinositide-3-kinase (PI3K) regulatory subunit 4, p150 p150. The compound is an antisense oligonuclectide that specifically hybridises with a nucleic acid molecule encoding PI3K regulatory subunit 4, p150 and inhibits expression of the polypeptide. The antisense oligonuclectide comprises at least one modified internucleoside linkage i.e. a phosphorothioate linkage at least one modified sugar molety, preferably a 2.-O-methoxyethyl sugar molety, or at least one modified nucleobase comprising a 5-methylcytosine. The antisense compounds are useful for modilating the expression of PI3K regulatory subunit 4, p150 and for preventing or treating hyperproliferative disorders and cancer), Chediak-Higashi syndrome, neurodegenerative disorders and metabolic disorders. These may also be used in research and diagnostics and in preventing or delaying infection or inflammation. This sequence represents a PI3K regulatory subunit 4, p150 DNA antisense
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Gарв
New antisense oligonucleotides inhibiting the expression of bhosphoinositide-3-kinase, regulatory subunit 4, p150, useful for preventing or treating diseases associated with the subunit, e.g. hyperproliferative disorders.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Human PI3K regulatory subunit 4, p150 DNA target region #20.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             0.4%; Score 20; DB 1; Length 20;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            0; Indela
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Sequence 20 BP; 5 A; 4 C; 6 G; 5 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1.4e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      oligonucleotide target region of the invention.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Pred. No. 1.4
0; Mismatches
                                                                                                                                                                               Example 15; SEQ ID NO 101; 62pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         998 TTCGTCATGGGGACATCAAG 1017
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           rrcercareeeacarcaae 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ADH26773 standard; DNA; 20 BP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              100.08;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  11-MAR-2004 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Best Local Similarity 100.
Matches 20; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ADH26773;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            RXAXAXB
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ò
```

ö

Gaps

ö

0; Indels

824 CTTTCCAGAAAGCATCAGAA 843

20; Conservative

Similarity

20

CTTTCCAGAAAGCATCAGAA

용 8

ADH26766 standard; DNA; 20 BP

RESULT 109

ADH26766;

ADH26766 ID ADH2 XX

```
RESULT 112
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Best Loca
Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ADH26796
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            원
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            The invention relates to a compound targeted to a nucleic acid molecule encoding human phosphoinositide-3-kinase (PI3K) regulatory subunit 4, p150. The compound is an antisense olisjonucleotide that specifically hybridises with a nucleic acid molecule encoding PI3K regulatory subunit 4, p150 and inhibits expression of the polypeptide. The antisense olisjonucleotide comprises at least one modified internucleoside linkage i. e. a phosphorothioate linkage, at least one modified sugar moiety, preferably a 2'-0-methoxyethyl sugar moiety, or at least one modified nucleobase comprising a 5-methyloytosine. The antisense compounds are nucleobase comprising the expression of PI3K regulatory subunit 4, p150 and for preventing or treating hyperproliferative disorders (i.e. cancel), chediak-Higashi syndrome, neurodegenserative disorders and entabolic disorders. These may also be used in research and diagnostics and in preventing or delaying infection or inflammation. This sequence is represents a PI3K regulatory subunit 4, p150 DNA antisense
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Human, phosphoinositide-3-kinase regulatory subunit 4; p150; P13K;
P13 kinase; ds; antisense oligonucleotide; phosphorothioate linkage;
2'-0-methoxyethyl sugar moiety; 5-methylcytosine;
                       Human, phosphoinositide-3-kinase regulatory subunit 4; p150; P13K; p13 kinase; ds; antisense oligonucleotide; phosphorothioate linkage; 2'-0-methoxyethyl sugar moiety; 5-methoxyetosine; hyperproliferative disorder; cancer; Chediak-Higashi syndrome; neurodegenerative disorder; metabolic disorders; inflammation; cytostatic; immunomodulator; neurodegenerative; antimicrobial;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             New antisense oligonucleotides inhibiting the expression of phosphoinositide-3-kinase, regulatory subunit 4, p150, useful for preventing or treating diseases associated with the subunit, e.g.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        .,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Human PI3K regulatory subunit 4, p150 DNA target region #28.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  / Match 0.4%; Score 20; DB 1; Length 20; Local Similarity 100.0%; Pred. No. 1.4e+02; les 20; Conservative 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Sequence 20 BP; 6 A; 5 C; 4 G; 5 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           oligonucleotide target region of the invention.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Example 15; SEQ ID NO 108; 62pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1630 CACAATCTCTGTGGACATGA 1649
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CACAATCTCTGTGGACATGA 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ADH26781 standard; DNA; 20 BP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             hyperproliferative disorders.
                                                                                                                                                                                                                                                                                                                                                                            31-MAY-2002; 2002US-00160786.
                                                                                                                                                                                                                                                                                                                                                                                                                            31-MAY-2002; 2002US-00160786
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    11-MAR-2004 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             (ISIS-) ISIS PHARM INC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Freier SM, Dobie KW;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       WPI; 2004-051923/05.
                                                                                                                                                                                      antiinflammatory.
                                                                                                                                                                                                                                                                                  US2003225013-A1.
                                                                                                                                                                                                                                    Homo sapiens.
                                                                                                                                                                                                                                                                                                                                   04-DEC-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ADH26781;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Best Loca
Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       RESULT 111
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ADH2678
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        MAKK SEX LX SX LX 
            à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               g
```

```
The invention relates to a compound targeted to a nucleic acid molecule encoding human phosphoinositide-3-kinase (PI3K) regulatory subunit 4, pl50. The compound is an antisense oligonucleotide that specifically the pl50 and inhibits expression of the polypeptide. The antisense oligonucleotide specifically 4, pl50 and inhibits expression of the polypeptide. The antisense oligonucleotide comprises at least one modified internucleoside linkage i.e. a phosphorothioate linkage, at least one modified sugar moiety, preferably a 2'-O-methoxyethyl sugar moiety, or at least one modified nucleobase comprising a 5-methylcytosine. The antisense compounds are nucleobase comprising the expression of PI3K regulatory subunit 4, pl50 and for preventing or treating hyperproliferative disorders (i.e. cancer), chediak-Higashi syndrome, neurodegenerative disorders and cancer), chediak-Higashi syndrome, neurodegenerative disorders and in preventing or delaying infection or inflammation. This sequence and increasing a PI3K regulatory subunit 4, pl50 DNA antisense
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Human; phosphoinositide-3-kinase regulatory subunit 4; p150; P13K; P13 kinase; ds; antisense oligonuclectide; phosphorothioate linkage; 2'-0-methoxyethyl sugar moiety; 5-methylsytosine; hypexproliferative disorder; cancer; Chediak-Higashi syndrome; neurodegenerative disorder; metabolic disorders; inflammation; cytostatic; immunomodulator; neurodegenerative antimicrobial; antiinflammatory.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         New antisense oligonucleotides inhibiting the expression of phosphoinositide-3-kinase, regulatory subunit 4, p150, useful for preventing or treating diseases associated with the subunit, e.g. hyperproliferative disorders.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ;
0
hyperproliferative disorder; cancer; Chediak-Higashi syndrome; neurodegenerative disorder; metabolic disorders; inflammation; cytostatic; immunomodulator; neurodegenerative; antimicrobial;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Human PI3K regulatory subunit 4, p150 DNA target region #43.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             h Similarity 100.0%; Pred. No. 1.4e+02; 20; Conservative 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Sequence 20 BP; 5 A; 1 C; 6 G; 8 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            oligonucleotide target region of the invention.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Example 15; SEQ ID NO 116; 62pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         2438 TTAGTGATGCTGAGGAATTT 2457
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ADH26796 standard; DNA; 20 BP
                                                                                                                                                                                                                                                                                                                                                                                                                     31-MAY-2002; 2002US-00160786.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        31-MAY-2002; 2002US-00160786.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           11-MAR-2004 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      (ISIS-) ISIS PHARM INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Dobie KW;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  WPI; 2004-051923/05.
                                                                                                                                antiinflammatory.
                                                                                                                                                                                                                                                                         US2003225013-A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Ma.
Local S.
20;
                                                                                                                                                                                                      Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                   04-DEC-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Freier SM,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ADH26796;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Query Match
```

```
31-MAY-2002; 2002US-00160786.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      US2003225013-A1.
              04-DEC-2003
                                                                                                                                     Freier SM,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     04-DEC-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ADH26679;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Best Loca
Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     RESULT 114
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ADH26679/
유
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ઠે
                                                                                                                                                                                                                                                                                                                                                                   The invention relates to a compound targeted to a nucleic acid molecule encoding human phosphoinositide-3-kinase (PI3K) regulatory subunit 4, p150. The compound is an antisense oligonucleotide that specifically hybridises with a nucleic acid molecule encoding PI3K regulatory subunit 4, p150 and inhibits expression of the polypeptide. The antisense oligonucleotide comprises at least one modified internucleoside linkage i.e. a phosphorothioate linkage, at least one modified sugar moiety, preferably a 2'-O-methoxyethyl sugar moiety, or at least one modified nucleobase comprising the expression of P13K regulatory subunit 4, p150 nucleobase comprising a 5-methylcytosine. The antisense compounds are useful for modilating the expression of P13K regulatory subunit 4, p150 and for preventing or treating hyperproliferative disorders and metabolic disorders. These may also be used in research and diagnostics and in preventing or delaying infection or inflammation. This sequence represents a P13K regulatory subunit 4, p150 DNA antisense
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Human; phosphoinositide-3-kinase regulatory subunit 4; p150; p13K; p13 kinase; ds; antisense oligonucleotide; phosphorothioate linkage; 2'-O-methoxyethyl sugar molety; 5-methylcytosine; hyperproliferative disorder; cancer; Chedlak-Higashi syndrome; neurodegenerative disorder; metabolic disorders; inflammation; cytostatic; immunomodulator; neurodegenerative; antimicrobial;
                                                                                                                                                                                                                                                         New antisense oligonucleotides inhibiting the expression of phosphoinositide-3-kinase, regulatory subunit 4, p150, useful for preventing or treating diseases associated with the subunit, e.g. hyperproliferative disorders.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Human PI3K regulatory subunit 4, p150 DNA target region #47.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Score 20; DB 1; Length 20;
Pred. No. 1.4e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Seguence 20 BP; 9 A; 1 C; 6 G; 4 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               100.0%; Pred. No. ...
0; Mismatches
                                                                                                                                                                                                                                                                                                                                           Example 15; SEQ ID NO 131; 62pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     3455 AGATGATGGAAAATGCTGAA 3474
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1 AGATGATGGAAAATGCTGAA 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ADH26800 standard; DNA; 20 BP
                                                                                                      31-MAY-2002; 2002US-00160786.
                                                                                                                                     31-MAY-2002; 2002US-00160786.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Conservative
                                                                                                                                                                   (ISIS-) ISIS PHARM INC
                                                                                                                                                                                                  Freier SM, Dobie KW;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Local Similarity
                                                                                                                                                                                                                              WPI; 2004-051923/05.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          antiinflammatory.
                                           US2003225013-A1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    US2003225013-A1
                Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Ното варіепв
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              11-MAR-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        20;
                                                                         04-DEC-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ADH26800;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   RESULT 113
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Matches
```

a ઠે

```
The invention relates to a compound targeted to a nucleic acid molecule encoding human phosphoinositide-3-kinase (PI3K) regulatory subunit 4, p150 p150. The compound is an antisense oligonucleotide that specifically hybridises with a nucleic acid molecule encoding PI3K regulatory subunit 4, p150 and inhibits expression of the polypeptide. The antisense oligonucleotide comprises at least one modified internucleoside linkage i.e. a phosphorothicate linkage, at least one modified sugar moiety, preferably a 2-0-methoxyethyl sugar moiety, or at least one modified nucleobase comprising a 5-methylcytosine. The antisense compounds are useful for modulating the expression of FI3K regulatory subunit 4, p150 and for preventing or treating hyperproliferative disorders and metabolic disorders. These may also be used in research and diagnostics metabolic disorders. These may also be used in research and diagnostics and in preventing or delaying infection or inflammation. This sequence represents a FI3K regulatory subunit 4, p150 DNA antisense
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Human PI3K regulatory subunit 4, p150 DNA antisense oligonucleotide #4
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Human, phosphoinositide-3-kinase regulatory subunit 4; p150; P13K; P13 kinase; ss; antisense oligonucleotide; phosphorothioate linkage; 2'-O-methoxyethyl sugar moiety; 5-methylcytosine; hyperproliferative disorder; cancer; Chediak-Higashi syndrome; neurodegenerative disorder; metabolic disorder; inflammation; cytostatic; immunomodulator; neurodegenerative; antimicrobial;
                                                                                                                                                                                                                                                                                                                                                                                                           New antisense oligonucleotides inhibiting the expression of phosphoinositide-3-kinase, regulatory subunit 4, p150, useful for preventing or treating diseases associated with the subunit, e.g. hyperproliferative disorders.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 0.4%; Score 20; DB 1; Length 20; 00.0%; Pred. No. 1.4e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Sequence 20 BP; 3 A; 4 C; 5 G; 8 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     represents a PI3K regulatory subunit 4, p150 DN oligonucleotide target region of the invention.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              100.0%; Pred. No. 1.4 iive 0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Example 15; SEQ ID NO 135; 62pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          3762 TGTCCAGCTTCTTGGAATTG 3781
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1 rerccaectrcrresaarre 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ADH26679 standard; DNA; 20 BP.
31-MAY-2002; 2002US-00160786
                                                                                    31-MAY-2002; 2002US-00160786
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    11-MAR-2004 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Local Similarity 100.
                                                                                                                                                                    (ISIS-) ISIS PHARM INC.
                                                                                                                                                                                                                                                    Dobie KW;
                                                                                                                                                                                                                                                                                                                                    WPI; 2004-051923/05
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          antiinflammatory
```

```
RESULT 116
                                                                                                                                                                                                                                                                                                                                                                                                          Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ADH26697
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                          g
                                                                                                                                                                                                      The invention relates to a compound targeted to a nucleic acid molecule encoding human phosphoinositide-3-kinase (PI3K) regulatory subunit 4, plso in the invention is an antisense oligonucleotide that specifically plso. The compound is an antisense oligonucleotide that specifically the inventions with a nucleic acid molecule encoding PI3K regulatory subunit 4, plso and inhibits expression of the polypeptide. The antisense comparises at least one modified internucleoside linkage i.e. a phosphorothioate linkage, at least one modified sugar moiety, preferably a 2'-0-methoxyethyl sugar moiety, or at least one modified nucleobase comprising a 5-methylcytosine. The antisense compounds are nucleobase comprising the expression of PI3K regulatory subunit 4, plso and for preventing or treating hyperproliferative disorders (i.e. cancer), Chediak-Higashi syndrome, neurodegenerative disorders and encabolic disorders. These may also be used in research and diagnostics and in preventing or delaying infection or inflammation. This sequence in represents an antisense oligonucleotide of the invention.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Human P13K regulatory subunit 4, p150 DNA antisense oligonucleotide #21.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Human; phosphoinositide-3-kinase regulatory subunit 4; p150; P13K; p13 kinase; ss; antisense oligonucleotide; phosphorothioate linkage; 2'-O-methoxyethyl sugar molety; 5-methylytosine; hyperproliferative disorder; cancer; Chediak-Higashi syndrome; neurodegenerative disorder; metabolic disorders; inflammation; cytostatic; immunomodulator; neurodegenerative; antimicrobial;
                                                                                                               New antisense oligonucleotides inhibiting the expression of phosphoinositide-3-kinase, regulatory subunit 4, p150, useful for preventing or treating diseases associated with the subunit, e.g. hyperproliferative disorders.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ..
                                                                                                                                                                                                                                                                                                                                                                                                                                                   0.4%; Score 20; DB 1; Length 20; 00.0%; Pred. No. 1.4e+02; ve 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                           Sequence 20 BP; 4 A; 4 C; 5 G; 7 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 100.0%; Pred. No. 1.4
tive 0; Mismatches
                                                                                                                                                                                     Example 15; SEQ ID NO 14; 62pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          391 CTATGAAGAAGACCCTTCG 410
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          20 CTATGAAGAAGACCCTTCG 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             31-MAY-2002; 2002US-00160786
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      31-MAY-2002; 2002US-00160786.
             31-MAY-2002; 2002US-00160786
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ADH26696 standard; DNA; 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                        Query Match 0.4%
Best Local Similarity 100.0
Matches 20; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 (ISIS-) ISIS PHARM INC.
                                        (ISIS-) ISIS PHARM INC
                                                                  Freier SM, Dobie KW;
                                                                                             WPI; 2004-051923/05.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         antiinflammatory.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           US2003225013-A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         11-MAR-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ADH26696;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            RESULT 115
     ò
```

```
The invention relates to a compound targeted to a nucleic acid molecule encoding human phosphoinositide-3-kinase (PI3K) regulatory subunit 4, p150. The compound is an antisense oligonucleotide that specifically hybridises with a nucleic acid molecule encoding PI3K regulatory subunit hybridises with a nucleic acid molecule encoding PI3K regulatory subunit coligonucleotide comprises at least one modified. The antisense oligonucleotide comprises at least one modified internucleoside linkage i.e. a phosphorothioate linkage, at least one modified sugar moiety, preferably a 2-0-methoxyethyl sugar moiety, or at least one modified nucleobase comprising a 5-methyloryosine. The antisense compounds are nateleobase comprising the expression of PI3K regulatory subunit 4, p150 and for preventing or treating hyperproliferative disorders and metabolic disorders. These may also be used in research and diagnostics and in preventing or delaying infection or inflammation. This sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Human PI3K regulatory subunit 4, p150 DNA antisense oligonucleotide #22.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Human; phosphoinositide-3-kinase regulatory subunit 4; p150; P13K; p13 kinase; ss; antisense oligonucleotide; phosphorothioate linkage; 2'-O-methoxyethyl sugar moiety; 5-methylcytosine; hyperproliferative disorder; cancer; Chediak-Higashi syndrome; neurodegenerative disorder; metabolic disorders; inflammation; cytostatic; immunomodulator; neurodegenerative; antimicrobial;
                                                                                                                                                              for
                                                                                                             New antisense oligonucleotides inhibiting the expression of phosphoinositide-3-kinase, regulatory subunit 4, p150, useful for preventing or treating diseases associated with the subunit, e.g. hyperproliferative disorders.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            New antisense oligonucleotides inhibiting the expression of
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             0.4%; Score 20; DB 1; Length 20;
100.0%; Pred. No. 1.4e+02;
rative 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 represents an antisense oligonucleotide of the invention.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Sequence 20 BP; 3 A; 7 C; 2 G; 8 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                              Example 15; SEQ ID NO 31; 62pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1268 AGTTGAAGAGAGCAATGGAC 1287
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             20 AGTTGAAGAGAGCAATGGAC 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            31-MAY-2002; 2002US-00160786.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        31-MAY-2002; 2002US-00160786
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ADH26697 standard; DNA; 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 11-MAR-2004 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            (ISIS-) ISIS PHARM INC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       WPI; 2004-051923/05.
Freier SM, Dobie KW;
                                                                   WPI; 2004-051923/05.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    antiinflammatory
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            US2003225013-A1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Mac
Local Sin
20;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            04-DEC-2003.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Freier SM,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ADH26697;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Query Match
```

```
The invention relates to a compound targeted to a nucleic acid molecule encoding human phosphoinostide-1-kinase (P13K) regulatory subunit 4, p150. The compound is an antisense oligonucleotide that specifically hybridises with a nucleic acid molecule encoding P13K regulatory subunit 4, p150 and inhibits expression of the polypeptide. The antisense oligonucleotide comprises at least one modified internucleoside linkage i.e. a phosphorothioate linkage, at least one modified sugar moiety, preferably a 2'-0-methoxyethyl sugar moiety, or at least one modified nucleobase comprising a 5-methyloytosine. The antisense compounds are useful for modulating the expression of P13K regulatory subunit 4, p150 and for preventing or treating hyperproliferative disorders and cancer), Chediak-Higashi syndrome, neurodegenerative disorders and metabolic disorders. These may also be used in research and diagnostics and in preventing or delaying infection or inflammation. This sequence represents an antisense oligonucleotide of the invention.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Human PI3K regulatory subunit 4, p150 DNA antisense oligonucleotide #31.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Human; phosphoinositide-3-kinase regulatory subunit 4; p150; P13K; P13 kinase; ss; antisense oligonucleotide; phosphorothioate linkage; 2'-O-methoxyethyl sugar moiety; 5-methylcytosine; hyperproliferative disorder; cancer; Chediak-Higashi syndrome; neurodegenerative disorder; metabolic disorders; inflammation; cytostatic; immunomodulator; neurodegenerative; antimicrobial;
phosphoinositide-3-kinase, regulatory subunit 4, p150, useful for preventing or treating diseases associated with the subunit, e.g. hyperproliferative disorders.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       New antisense oligonucleotides inhibiting the expression of phosphoinostide. 1-kinase, regulatory subunit 4, pl50, useful for preventing or treating diseases associated with the subunit, e.g. hyperproliferative disorders.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Score 20; DB 1; Length 20;
Pred. No. 1.4e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                               Sequence 20 BP; 6 A; 8 C; 2 G; 4 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                       0.4%; Scor.
100.0%; Pred. No. ...
                                                                               Example 15; SEQ ID NO 32; 62pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1299 AGGITGIGIGATAGCIGAGC 1318
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AGGTTGTGTGATAGCTGAGC 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  706/c
ADH26706 standard; DNA; 20 BP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              31-MAY-2002; 2002US-00160786.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  31-MAY-2002; 2002US-00160786.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Best Local Similarity 100.
Matches 20; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        (ISIS-) ISIS PHARM INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Freier SM, Dobie KW;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    WPI; 2004-051923/05.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        antiinflammatory
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    JS2003225013-A1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              11-MAR-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          04-DEC-2003.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ADH26706;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ADH26706,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ઠે
```

Example 15; SEQ ID NO 41; 62pp; English

ö

```
The invention relates to a compound targeted to a nucleic acid molecule encoding human phosphoinositide-3-kinase (PI3K) regulatory subunit 4, p150. The compound is an antisense oligonucleotide that specifically hybridises with a nucleic acid molecule encoding PI3K regulatory subunit 4, p150 and inhibits expression of the polypeptide. The antisense oligonucleotide comprises at least one modified internucleoside linkage i.e. a phosphorothioset linkage, at least one modified sugar motety, or at least cone modified nucleobase comprising a 5-methylotytosine. The antisense compounds are useful for modulating the expression of PI3K regulatory subunit 4, p150 and for preventing or treating hyperproliferative disorders (i.e. cancer). Chediak-Higashi syndrome, neurodegenerative disorders and metabolic disorders. These may also be used in research and diagnostics and in preventing or delaying infection or inflammation. This sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              The invention relates to a compound targeted to a nucleic acid molecule encoding human phosphoinositide-3-kinase (PT3K) regulatory subunit 4, p150. The compound is an antisense oligonuclectide that specifically hybridises with a nucleic acid molecule encoding PI3K regulatory subunit
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Human PI3K regulatory subunit 4, p150 DNA antisense oligonucleotide #45.
                                                                                                                                                                                                                                                                                                                                                                                                                    Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Human; phosphoinositide-3-kinase regulatory subunit 4; p150; P13K; P13 kinase; ss; antisense oligonucleotide; phosphorothioate linkage; 2'-O-methoxyethyl sugar moiety; 5-methylcytosine; hyperproliferative disorder; cancer; Chediak-Higashi syndrome; neurodegenerative disorder; metabolic disorders; inflammation; cytostatic; immunomodulator; neurodegenerative; antimicrobial;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     New antisense oligonucleotides inhibiting the expression of phosphoinositide-3-kinase, regulatory subunit 4, p150, useful for preventing or treating diseases associated with the subunit, e.g.
                                                                                                                                                                                                                                                                                                                                                                                                                    ô
                                                                                                                                                                                                                                                                                              represents an antisense oligonucleotide of the invention.
                                                                                                                                                                                                                                                                                                                                                                          0.4%; Score 20; DB 1; Length 20; 100.0%; Pred. No. 1.4e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                  0; Indels
                                                                                                                                                                                                                                                                                                                                   Sequence 20 BP; 7 A; 2 C; 6 G; 5 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                              0, Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Example 15; SEQ ID NO 55; 62pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                       1706 CIGITATAACATCCTGCCTA 1725
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CTGTTATAACATCCTGCCTA 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 BP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   hyperproliferative disorders.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          31-MAY-2002; 2002US-00160786.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 31-MAY-2002; 2002US-00160786.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ADH26720 standard; DNA; 20
                                                                                                                                                                                                                                                                                                                                                            Query Match
Best Local Similarity 100.0
....hes 20; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           11-MAR-2004 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      (ISIS-) ISIS PHARM INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Dobie KW;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  WPI; 2004-051923/05.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 antiinflammatory
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           US2003225013-A1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   04-DEC-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Freier SM,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ADH26720;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            RESULT 118
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            셤
```

```
ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          The invention relates to a compound targeted to a nucleic acid molecule encoding human phosphoinositide-3-kinase (PI3K) regulatory subunit 4, p150. The compound is an antisense oligonucleotide that specifically hybridises with a nucleic acid molecule encoding PI3K regulatory subunit 4, p150 and inhibits expression of the polypeptide. The antisense oligonucleotide comprises at least one modified internucleoside linkage i.e. a phosphorothioate linkage, at least one modified sugar moiety, preferably a 2'-0-methoxyethyl sugar moiety, or at least compounds are nucleobase comprising a 5-methylcytosine. The antisense compounds are
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Human PI3K regulatory subunit 4, p150 DNA antisense oligonucleotide #75.
4, pls0 and inhibits expression of the polypeptide. The antisense oligonucleotide comprises at least one modified internucleoside linkage i.e. a phosphorothioate linkage, at least one modified sugar moiety, preferably a 2'-O-methoxyethyl sugar moiety, or at least one modified nucleobase comprising a 5-methylcycosine. The antisense compounds are useful for modulating the expression of P13K regulatory subunit 4, pls0 and for preventing or treating hyperproliferative disorders (i.e. cancer). Chediak-Higashi syndrome, neurodegenerative disorders and metabolic disorders. These may also be used in research and diagnostics and in preventing or delaying infection or inflammation. This sequence represents an antisense oligonucleotide of the invention.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Human; phosphoinositide-3-kinase regulatory subunit 4; p150; p13K; p13 kinase; ss; antisense oligonucleotide; phosphorothioate linkage; 2'-O-methoxyethyl sugar moiety; 5-methylcytosine; hyperproliferative disorder; cancer; Chediak-Higashi syndrome; neurodegenerative disorder; metabolic disorders; inflammation; cytostatic; immunomodulator; neurodegenerative; antimicrobial;
                                                                                                                                                                                                                                                                                                                                       Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            New antisense oligonucleotides inhibiting the expression of phosphoinositide-3-kinase, regulatory subunit 4, p150, useful for preventing or treating diseases associated with the subunit, e.g. hyperproliferative disorders.
                                                                                                                                                                                                                                                                                                                                       ;
                                                                                                                                                                                                                                                                                            0.4%; Score 20; DB 1; Length 20; 100.0%; Pred. No. 1.4e+02; tive 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                          Sequence 20 BP; 3 A; 6 C; 3 G; 8 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Example 15; SEQ ID NO 85; 62pp; English.
                                                                                                                                                                                                                                                                                                                                                                                   2913 AGAGGAAGACAAACTICIGG 2932
                                                                                                                                                                                                                                                                                                                                                                                                          AGAGGAAGACAAACTTCTGG 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     31-MAY-2002; 2002US-00160786
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            31-MAY-2002; 2002US-00160786
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ADH26750 standard; DNA; 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 (first entry)
                                                                                                                                                                                                                                                                                                                                              20; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     (ISIS-) ISIS PHARM INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Dobie KW;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  WPI; 2004-051923/05.
                                                                                                                                                                                                                                                                                                       Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       antiinflammatory.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       US2003225013-A1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 11-MAR-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              04-DEC-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Freier SM,
                                                                                                                                                                                                                                                                                                                                                                                                                            20
                                                                                                                                                                                                                                                                                                                                                  Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 8
                                                                                                                                                                                                                                                                                                                                                                                                                            셤
```

```
The invention relates to a compound targeted to a nucleic acid molecule encoding human phosphoinositide-3-kinase (PI3K) regulatory subunit 4, p150. The compound is an antisense oligonucleotide that specifically hypridises with a nucleic acid molecule encoding PI3K regulatory subunit hypromoteriases with a nucleic acid molecule encoding PI3K regulatory subunit coligonucleotide comprises at least one modified. The antisense oligonucleotide comprises at least one modified internucleoside linkage i.e. a phosphorothioate linkage, at least one modified sugar moiety, preferably a 2-0-methoxyethyl sugar moiety, or at least one modified nucleobase comprising a 5-methyloytosine. The antisense compounds are useful for modulating the expression of PI3K regulatory subunit 4, p150 and for preventing or treating hyperproliferative disorders and metabolic disorders. These may also be used in research and diagnostics and in preventing or delaying infection or inflammation. This sequence
                                                                                                                                                                                                                      ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Human P13K regulatory subunit 4, p150 DNA antisense oligonucleotide #78.
useful for modulating the expression of PI3K regulatory subunit 4, p150 and for preventing or treating hyperproliferative disorders (i.e. cancer), Chediak-Higashi syndrome, neurodegenerative disorders and metabolic disorders. These may also be used in research and diagnostics and in preventing or delaying infection or inflammation. This sequence represents an antisense oligonucleotide of the invention.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Human, phosphoinositide-3-kinase regulatory subunit 4; p150; p118k; p13 kinase; ss; antisense oligonucleotide; phosphorothioate linkage; 2'-0-methoxyethyl sugar moiety; 5-methoxyetosine; hyperproliferative disorder; cancer; Chediak-Higashi syndrome; neurodegenerative disorder; metabolic disorders; inflammation; cytostatic; immunomodulator; neurodegenerative; antimicrobial;
                                                                                                                                                                                                                        Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      New antisense oligonucleotides inhibiting the expression of phosphoinositide-3-kinase, regulatory subunit 4, p150, useful for preventing or treating diseases associated with the subunit, e.g.
                                                                                                                                                                                                                        ö
                                                                                                                                                                             Score 20; DB 1; Length 20;
Pred. No. 1.4e+02;
                                                                                                                                                                                                                        0; Indels
                                                                                                                                        Sequence 20 BP; 7 A; 4 C; 5 G; 4 T; 0 U; 0 Other;
                                                                                                                                                                                               100.0%; Pred. ...
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Example 15; SEQ ID NO 88; 62pp; English.
                                                                                                                                                                                                                                                                 4761 CIGITICAIGACIGAC 4780
                                                                                                                                                                                                                                                                                         CTGTTTCATGACTGACTGAC 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   hyperproliferative disorders.
                                                                                                                                                                                                                                                                                                                                                                                                    ADH26753 standard; DNA; 20 BP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                31-MAY-2002; 2002US-00160786.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     31-MAY-2002; 2002US-00160786.
                                                                                                                                                                                     0.4%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 11-MAR-2004 (first entry)
                                                                                                                                                                                                                          Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            (ISIS-) ISIS PHARM INC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   WPI; 2004-051923/05.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Dobie KW;
                                                                                                                                                                                                  Local Similarity
ses 20; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             antiinflammatory
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         US2003225013-A1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             04-DEC-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Freier SM,
                                                                                                                                                                                                                                                                                                                                                                                                                                            ADH26753;
                                                                                                                                                                                                                                                                                                        20
                                                                                                                                                                                       Query Match
                                                                                                                                                                                                                                                                                                                                                                 RESULT 120
                                                                                                                                                                                                                                Matches
                                                                                                                                                                                                                                                                                                                                                                                       ADH26753
                                                                                                                                                                                                                                                                                                                                                                                                        8888888
                                                                                                                                                                                                                                                                                                      g
                                                                                                                                                                                                                                                                       Š
```

Gaps

ö

Indels

Length 20;

DB 1; Le 1.4e+02;

0.4%; Score 20; DB ilarity 100.0%; Pred. No. 1.4 Conservative 0; Mismatches

Best Local Similarity Matches 20; Conserv

Query Match

CTGG 2932

2913 AGAGGAAGACAAACTT

8

ö

Gaps

ô

1 AGAGGAAGACAAACTTCTGG 20

BP.

ADH26789 standard; DNA; 20

RESULT 122

```
The invention relates to a compound targeted to a nucleic acid molecule encoding human phosphoinositide-3-kinase (P13K) regulatory subunit 4, p150 p150. The compound is an antisense oligonucleotide that specifically hybridises with a nucleic acid molecule encoding P13K regulatory subunit 4, p150 and inhibits expression of the polypeptide. The antisense oligonucleotide comprises at least one modified internucleoside linkage i.e. a phosphorothioate linkage, at least one modified sugar moiety, preferably a 2'-O-methoxyethyl sugar moiety, or at least one modified nucleobase comprising the expression of F13K regulatory subunit 4, p150 and for preventing or treating hyperproliferative disorders and metabolic disorders. These may also be used in research and diagnostics and in preventing or delaying infection or inflammation. This sequence represents a F13K regulatory subunit 4, p150 DNA antisense
                                                                                                                                                                                                                                                                                                                                                                                                   Human; phosphoinositide-3-kinase regulatory subunit 4; p150; P13K; P13 kinase; ds; antisense oligonucleotide; phosphorothioate linkage; 2'-O-methoxyethyl sugar moiety; 5-methylcytosine; hyperproliferative disorder; cancer; Chediak-Higashi syndrome; neurodegenerative disorder; metabolic disorders; inflammation; cytostatic; immunomodulator; neurodegenerative; antimicrobial;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         New antisense oligonucleotides inhibiting the expression of phosphoinositide-3-kinase, regulatory subunit 4, p150, useful for preventing or treating diseases associated with the subunit, e.g. hyperproliferative disorders.
                                                                                                                                                                                                                                                                                                                                                                      Human PI3K regulatory subunit 4, p150 DNA target region #35.
represents an antisense oligonucleotide of the invention.
                                                                 Length 20;
                                                                                                    0; Indels
                                Sequence 20 BP; 8 A; 3 C; 5 G; 4 T; 0 U; 0 Other;
                                                                 Score 20; DB 1; L
Pred. No. 1.4e+02;
                                                      0.4%; Scor.
100.0%; Pred. No. 1...
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Example 15; SEQ ID NO 123; 62pp; English.
                                                                                                                                     CTTATGCATCTCTTTGCAAG 4842
                                                                                                                                                                      criariccarcriridcaag 1
                                                                                                                                                                                                                                                              ADH26788 standard; DNA; 20 BP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     31-MAY-2002; 2002US-00160786.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       31-MAY-2002; 2002US-00160786.
                                                                                                                                                                                                                                                                                                                                   (first entry)
                                                              Query Match
Best Local Similarity 100.
Matches 20, Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          (ISIS-) ISIS PHARM INC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Freier SM, Dobie KW;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              WPI; 2004-051923/05.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               antiinflammatory
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   US2003225013-A1
                                                                                                                                                                                                                                                                                                                                   11-MAR-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      04-DEC-2003
                                                                                                                                       4823
                                                                                                                                                                                                                                                                                                ADH26788;
                                                                                                                                                                      20
                                                                                                                                                                                                                             RESULT 121
                                                                                                                                                                                                                                               ADH26788
SXS
                                                                                                                                                                                                                                                              ઠે
                                                                                                                                                                      유
```

Human, phosphoinositide-3-kinase regulatory subunit 4; p150; P13K; P13 kinase; ds; antisense oligonucleotide; phosphorothioate linkage; 2'-O-methoxyethyl sugar moiety; 5-methyloytosine; hyperproliferative disorder; cancer; Chediak-Higashi syndrome; neurodegenerative disorder; metabolic disorders; inflammation; cytostatic; immunomodulator; neurodegenerative; antimicrobial;

antiinflammatory.

US2003225013-A1. Homo sapiens.

04-DEC-2003

Human PI3K regulatory subunit 4, p150 DNA target region #36.

(first entry)

11-MAR-2004

ADH26789;

Sequence 20 BP; 7 A; 2 C; 5 G; 6 T; 0 U; 0 Other; oligonucleotide target region of the invention. 

New antisense oligonucleotides inhibiting the expression of phosphoinositide-3-kinase, regulatory subunit 4, p150, useful for preventing or treating diseases associated with the subunit, e.g. hyperproliferative disorders.

31-MAY-2002; 2002US-00160786. 31-MAY-2002; 2002US-00160786.

(ISIS-) ISIS PHARM INC. Freier SM, Dobie KW; WPI; 2004-051923/05.

Gaps ö 0.4%; Score 20; DB 1; Length 20; 0; Indels 100.0%; Pred. No. 1.4e+02; tive 0; Mismatches 0; Query Match Best Local Similarity 100.0 Matches 20; Conservative

Sequence 20 BP; 8 A; 3 C; 6 G; 3 T; 0 U; 0 Other;

ô

The invention relates to a compound targeted to a nucleic acid molecule encoding human phosphoinositide-3-kinase (PI3K) regulatory subunit 4, p150 p150. The compound is an antisense oligonucleotide that specifically hybridises with a nucleic acid molecule encoding PI3K regulatory subunit 4, p150 and inhibits expression of the polypeptide. The antisense oligonucleotide comprises at least one modified internucleoside linkage i.e. a phosphorothioate linkage, at least one modified augar moiety, preferably a 2'-O-methoxyethyl sugar moiety, or at least one modified cuseful for modulating the expression of F13K regulatory subunit 4, p150 and for preventing or treating hyperproliferative disorders and cancer), Chediak-Higashi syndrome, neurodegenerative disorders and metabolic disorders. These may also be used in research and diagnostics metabolic disorders. These may also be used in research and diagnostics cancer:

"Expresents a P13K regulatory subunit 4, p150 DNA antisense Example 15; SEQ ID NO 124; 62pp; English.

ð

gibbs-10-667-022-4.rng

```
The invention relates to a compound targeted to a nucleic acid molecule encoding human phosphoinositide-3-kinase (PI3K) regulatory subunit 4, p150 The compound its an antisense oligonucleotide that specifically hybridises with a nucleic acid molecule encoding PI3K regulatory subunit 4, p150 and inhibits expression of the polypeptide. The antisense oligonucleotide comprises at least one modified internucleoside linkage i.e. a phosphorothioate linkage, at least one modified sugar moiety, preferably a 2'-0-methoxyethyl sugar moiety, or at least one modified nucleobase comprising a 5-methylcytosine. The antisense compounds are useful for modulating the expression of P13K regulatory subunit 4, p150 and for preventing or treating hyperproliferative disorders and metholic disorders. These may also be used in research and diagnostics and in preventing or delaying infection or inflammation. This sequence represents a P13K regulatory subunit 4, p150 DNA antisense
                                                                                                                                                                                                                                                                                Human; phosphoinositide-3-kinase regulatory subunit 4; p150; p13K; p13 kinase; ds; antisense oligonucleotide; phosphorothioate linkage; 2'-O-methoxyethyl sugar moiety; 5-methylcytosine; hyperproliferative disorder; cancer; Chediak-Higashi syndrome; neurodegenerative disorder; metabolic disorders; inflammation;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     New antisense oligonucleotides inhibiting the expression of
phosphoinositide-3-kinase, regulatory subunit 4, p150, useful for
preventing or treating diseases associated with the subunit, e.g.
                                                                                                                                                                                                                                                                                                                                                                               immunomodulator; neurodegenerative; antimicrobial;
                                                                                                                                                                                                                                            Human PI3K regulatory subunit 4, p150 DNA target region #49.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Sequence 20 BP; 2 A; 8 C; 3 G; 7 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              0.4%; scc...
100.0%; Pred. No. ...
0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Example 15; SEQ ID NO 137; 62pp; English.
3009 TCAGAAAGGTGTAATTGACT 3028
                                     20
                     1 TCAGAAAGGTGTAATTGACT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  31-MAY-2002; 2002US-00160786.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          31-MAY-2002; 2002US-00160786.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   hyperproliferative disorders.
                                                                                                                               ADH26802 standard; DNA; 20
                                                                                                                                                                                                        11-MAR-2004 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Query Match
Best Local Similarity 100.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ISIS-) ISIS PHARM INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Dobie KW;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       WPI; 2004-051923/05.
                                                                                                                                                                                                                                                                                                                                                                                                   antiinflammatory
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         US2003225013-A1.
                                                                                                                                                                                                                                                                                                                                                                                                                                       Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                   cytostatic;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              04-DEC-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Freier SM,
                                                                                                                                                                    ADH26802;
                                   셤
                                                                                                                                                                    8XCCCCCCCCCCCCCCCX8XT4FFF7XBXBXBXBXBX8XXBX8XXBXBX8XBXBXBXBXBX
```

```
The invention relates to a compound targeted to a nucleic acid molecule encoding human phosphoinositide-3-kinase (PI3K) regulatory subunit 4, p150. The compound is an antisense oligonucleotide that specifically hybridises with a nucleic acid molecule encoding PI3K regulatory subunit 4, p150 and inhibits expression of the polypeptide. The antisense in oligonucleotide comprises at least one modified internucleoside linkage i.e. a phosphorothioate linkage, at least one modified sugar moiety, preferably a 2'0-methoxyethyl sugar moiety, or at least one modified inchespase comprising a 5-methylcytosine. The antisense compounds are useful for modulating the expression of PI3K regulatory subunit 4, p150 and for preventing or treating hyperproliferative disorders and metabolic disorders. These may also be used in research and diagnostics and in preventing or delaying infection or inflammation. This sequence represents an antisense oligonucleotide of the invention.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ;
0
                                                                                                            Human PI3K regulatory subunit 4, p150 DNA antisense oligonucleotide #14.
                                                                                                                                           Human; phosphoinositide-3-kinase regulatory subunit 4; p150; P13K; p13 kinase; ss; antisense oligonucleotide; phosphorothioate linkage; 2'-O-methoxycthyl sugar moiety; 5-methyloycosine; hyperproliferative disorder; cancer; Chediak-Higashi syndrome; neurodegenerative disorder; metabolic disorders; inflammation; cytostatic; immunomodulator; neurodegenerative; antimicrobial;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          New antisense oligonucleotides inhibiting the expression of phosphoinositide-3-kinase, regulatory subunit 4, p150, useful for preventing or treating diseases associated with the subunit, e.g.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              0.4%; Score 20; DB 1; Length 20;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Sequence 20 BP; 6 A; 2 C; 7 G; 5 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1.4e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        100.0%; Pred. ...
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Example 15; SEQ ID NO 24; 62pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    914 CCCGTCCATTCTTGAATAAC 933
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   20 ccccrccarrcrrcarac 1
ADH26689 standard; DNA; 20 BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    hyperproliferative disorders.
                                                                                                                                                                                                                                                                                                                                                                                                        31-MAY-2002; 2002US-00160786.
                                                                                                                                                                                                                                                                                                                                                                                                                                               31-MAY-2002; 2002US-00160786.
                                                                         11-MAR-2004 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Local Similarity 100.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                (ISIS-) ISIS PHARM INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Dobie KW;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         WPI; 2004-051923/05.
                                                                                                                                                                                                                                                             antiinflammatory.
                                                                                                                                                                                                                                                                                                                                  US2003225013-A1.
                                                                                                                                                                                                                                                                                                  Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                       04-DEC-2003.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Freier SM,
                                      ADH26689;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Best Loca
Matches
 ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   a
```

ADH26721 standard; DNA; 20 BP.

ADH26721/c ID ADH267 XX

RESULT 125

ö

Gaps

.; 0

0; Indels

3991 GGCCTCATCACTTCCTTTGC 4010

ò

1 GGCCTCATCACTTCCTTTGC 20

Score 20; DB 1; Length 20;

1.4e+02;

```
ADH26765
    ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        The invention relates to a compound targeted to a nucleic acid molecule encoding human phosphoinositide-3-kinase (PI3K) regulatory subunit 4, p150. The compound is an antisense oligonucleotide that specifically hybridises with a nucleic acid molecule encoding PI3K regulatory subunit 4, p150 and inhibits expression of the polypeptide. The antisense oligonucleotide comprises at least one modified internucleoside linkage i.e. a phosphorochioate linkage, at least one modified internucleoside incleopase comprising a 5-methyl sugar moiety, or at least one modified nucleobase comprising a 5-methylcytosine. The antisense compounds are useful for modulating the expression of PI3K regulatory subunit 4, p150 and for preventing or treating hyperproliferative disorders (i.e. cancer), Chediak-Higaghi syndrome, neurodegenerative disorders and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Human P13K regulatory subunit 4, p150 DNA antisense oligonucleotide #61.
                                                    Human PI3K regulatory subunit 4, p150 DNA antisense oligonucleotide #46.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              cancer), Chediak-Higashi syndrome, neurodegenerative disorders and metabolic disorders. These may also be used in research and diagnostics and in preventing or delaying infection or inflammation. This sequence represents an antisense oligonucleotide of the invention.
                                                                        Human; phosphoinositide-3-kinase regulatory subunit 4; p150; p13K; p13 kinase; ss; antisense oligonucleotide; phosphorothioate linkage; 2'-0-methoxyethyl sugar molety; 5-methylcytosine; hyperproliferative disorder; cancer; Chediak-Higashi syndrome; neurodegenerative disorder; metabolic disorders; inflammation; cytostatic; immunomodulator; neurodegenerative; antimicrobial; antiliflammatory.
                                                                                                                                                                                                                                                                                                                                                                                                  New antisense oligonucleotides inhibiting the expression of phosphoinositide. 1-kinase, regulatory subunit 4, p150, useful for preventing or treating diseases associated with the subunit, e.g. hyperproliferative disorders.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    0.4%; Score 20; DB 1; Length 20;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Sequence 20 BP; 6 A; 5 C; 2 G; 7 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Pred. No. 1.4e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             100.0%; Prea. ....
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Example 15; SEQ ID NO 56; 62pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       3009 TCAGAAAGGTGTAATTGACT 3028
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TCAGAAAGTGTAATTGACT 1
                                                                                                                                                                                                                                                                                           31-MAY-2002; 2002US-00160786.
                                                                                                                                                                                                                                                                31-MAY-2002; 2002US-00160786.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ADH26736 standard; DNA; 20
                           (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               20; Conservative
                                                                                                                                                                                                                                                                                                                     (ISIS-) ISIS PHARM INC
                                                                                                                                                                                                                                                                                                                                               Freier SM, Dobie KW;
                                                                                                                                                                                                                                                                                                                                                                         WPI; 2004-051923/05.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Local Similarity
                                                                                                                                                                                                              US2003225013-A1.
                                                                                                                                                                                     Homo sapiens
                           11-MAR-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      11-MAR-2004
                                                                                                                                                                                                                                      04-DEC-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ADH26736;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      RESULT 120
ADH26736/C
ID ADH26
XX
AC ADH2C
XX
XX
DT 11-M
XX
XX
8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ઢ
```

```
The invention relates to a compound targeted to a nucleic acid molecule encoding human phosphoinositide-3-kinase (PI3K) regulatory subunit 4, p150.

p150. Feed an antisense oligonuclectide that specifically hybridises with a nucleic acid molecule encoding PI3K regulatory subunit 4, p150 and inhibits expression of the polypeptide. The antisense oligonuclectide comprises at least one modified internucleoside linkage i.e. a phosphorocrhioate linkage, at least one modified subar moiety. Preferably a 2-O-methoxyethyl sugar moiety, or at least one modified nucleobase comprising a 5-methylcytosine. The antisense compounds are useful for modulating the expression of PI3K regulatory subunit 4, p150 and for preventing or treating hyperproliferative disorders (i.e.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                cancer), Chediak-Higashi syndrome, neurodegenerative disorders and metabolic disorders. These may also be used in research and diagnostics and in preventing or delaying infection or inflammation. This sequence
pl3 kinase, se, antisense oligomuclootide, phosphorothioate linkage, 2'-O-methoxyethyl sugar moiety, 5-methylcytosine, phosphorothioate linkage, byperproliferative disorder, cancer, Chediak-Higashi syndrome; neurodegenerative disorder; netabolic disorders; inflammation; cytostatic; immunomodulator; neurodegenerative; immunomodulator; neurodegenerative; antimicrobial; antimicrobial; antimicrobial;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Gарв
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Human; phosphoinositide-3-kinase regulatory subunit 4; p150; P13K; P13 Kinase; ds; antisense oligonucleocide; phosphorothioate linkage; 2.-0-methoxyethyl sugar moiety; S-methylcytosine; hyperproliferative disorder; cancer; Chediak-Higashi syndrome;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    New antisense oligonucleotides inhibiting the expression of phosphoinositide-3-kinase, regulatory subunit 4, p150, useful for preventing or treating diseases associated with the subunit, e.g.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Human PI3K regulatory subunit 4, p150 DNA target region #12.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        represents an antisense oligonucleotide of the invention.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Length 20;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Sequence 20 BP; 7 A; 7 C; 4 G; 2 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    DB 1; Le
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Example 15; SEQ ID NO 71; 62pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    0.4%; Score 20; 100.0%; Pred. No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       3927 TCTGGTTGGCTGGGACCTTA 3946
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             20 rcredriedcredakcerra 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         hyperproliferative disorders.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                31-MAY-2002; 2002US-00160786.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     31-MAY-2002; 2002US-00160786.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ADH26765 standard; DNA; 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Local Similarity 100.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               (ISIS-) ISIS PHARM INC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Dobie KW;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  WPI; 2004-051923/05.
                                                                                                                                                                                                                                    antiinflammatory.
                                                                                                                                                                                                                                                                                                                                                                                US2003225013-A1
                                                                                                                                                                                                                                                                                                          Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       11-MAR-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                  04-DEC-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Freier SM,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ADH26765;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              RESULT 127
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Matches
```

```
ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      g
                                                                                                                                                                                                                                                                                                                                              The invention relates to a compound targeted to a nucleic acid molecule encoding human phosphoinositide-3-kinase (PI3K) regulatory subunit 4, p150. The compound is an antisense oligonucleotide that specifically hyptidises with a nucleic acid molecule encoding PI3K regulatory subunit 4, p150 and inhibits expression of the polypeptide. The antisense oligonucleotide comprises at least one modified internucleoside linkage i.e. a phosphorothicate linkage, at least one modified sugar moiety, preferably a 2'-0-methoxyethyl sugar moiety, or at least one modified nucleobase comprising the expression of F13K regulatory subunit 4, p150 and for preventing or treating hyperproliferative disorders and carner). Chediak-Higashi syndrome, neurodegenerative disorders and metabolic disorders. These may also be used in research and diagnostics and in preventing or delaying infection or inflammation. This sequence represents a P13K regulatory subunit 4, p150 DNA antisense
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Human; phosphoinositide-3-kinase regulatory subunit 4; p150; P13K; P13 kinase; ds; antisense oligonucleotide; phosphorothioate linkage; 2'-0-methoxyethyl sugar moiety; 5-methoxyetosine; hyperproliferative disorder; cancer; Chediak-Higashi syndrome; neurodegenerative disorder; metabolic disorders; inflammation; cytostatic; immunomodulator; neurodegenerative; antimicrobial;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Gaps
                                                                                                                                                                                                                                                     New antisense oligonucleotides inhibiting the expression of phosphoinositide-3-kinase, regulatory subunit 4, p150, useful for preventing or treating diseases associated with the subunit, e.g. hyperproliferative disorders.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ;
neurodegenerative disorder; metabolic disorders; inflammation; cytostatic; immunomodulator; neurodegenerative; antimicrobial;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Human PI3K regulatory subunit 4, p150 DNA target region #17.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Query Match 0.4%; Score 20; DB 1; Length 20; Best Local Similarity 100.0%; Pred. No. 1.4e+02; Matches 20; Conservative 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Sequence 20 BP; 6 A; 5 C; 5 G; 4 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                             Example 15; SEQ ID NO 100; 62pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      982 GCACACAAATCTGGAGTTCG 1001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1 GCACACAAATCTGGAGTTCG 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ADH26770 standard; DNA; 20 BP
                                                                                                                                                            31-MAY-2002; 2002US-00160786.
                                                                                                                               31-MAY-2002; 2002US-00160786
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                11-MAR-2004 (first entry)
                                                                                                                                                                                     (ISIS-) ISIS PHARM INC
                                                                                                                                                                                                              Freier SM, Dobie KW;
                                                                                                                                                                                                                                     WPI; 2004-051923/05.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               antiinflammatory.
                                antiinflammatory.
                                                                                 US2003225013-A1.
                                                         Homo sapiens.
                                                                                                           04-DEC-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ADH26770;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        RESULT 128
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ò
```

```
The invention relates to a compound targeted to a nucleic acid molecule encoding human phosphoinositide-3-kinase (PI3K) regulatory subunit 4, p150. The compound is an antisense oligonucleotide that specifically hypridises with a nucleic acid molecule encoding PI3K regulatory subunit hypridises with a nucleic acid molecule encoding PI3K regulatory subunit hypropriates and inhibits expression of the polypeptide. The antisense cligonucleotide comprises at least one modified internucleoside linkage i.e. a phosphorothioate linkage, at least one modified sugar moiety, preferably a 2'-O-methoxyethyl sugar moiety, or at least one modified nucleobase comprising a 5-methylcytosine. The antisense compounds are useful for modulating the expression of PI3K regulatory submit 4, p150 and for preventing or treating hyperproliferative disorders and cancer). Chediak-Higashi syndrome, neurodegenerative disorders and metabolic disorders. These may also be used in research and diagnostics and in preventing or delaying infection or inflammation. This sequence represents a PI3K regulatory subunit 4, p150 DNA antisense
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Human; phosphoinositide-3-kinase regulatory subunit 4; p150; P13K; P13 kinase; ds; antisense oligonuclectide; phosphorothioate linkage; 2'-O-methoxyethyl sugar moiety; 5-methylcytosine; hyperproliferative disorder; cancer; Chediak-Higashi syndrome; neurodegenerative disorder; metabolic disorder; inflammation; cytostatic; immunomodulator; neurodegenerative; inminomodulator; neurodegenerative; antimicrobial; antiniflammatory.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            for
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       New antisense oligonucleotides inhibiting the expression of phosphoinositide-3-kinase, regulatory subunit 4, p150, useful for preventing or treating diseases associated with the subunit, e.g.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Human PI3K regulatory subunit 4, p150 DNA target region #21.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         0.4%; Score 20; DB 1; Length 20;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Sequence 20 BP; 4 A; 2 C; 8 G; 6 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Pred. No. 1.4e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Similarity 100.0%; Pred. No. ....
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Example 15; SEQ ID NO 105; 62pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1299 AGGTTGTGTGATAGCTGAGC 1318
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1 AGGITGIGIGATAGCIGAGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ADH26774 standard; DNA; 20 BP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       hyperproliferative disorders.
                                                                                                                                                                                                      31-MAY-2002; 2002US-00160786
                                                                                                                                                                                                                                                                             31-MAY-2002; 2002US-00160786
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            11-MAR-2004 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Local Similarity 100.
es 20; Conservative
                                                                                                                                                                                                                                                                                                                                                    (ISIS-) ISIS PHARM INC.
                                                                                                                                                                                                                                                                                                                                                                                                                           Freier SM, Dobie KW;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               WPI; 2004-051923/05.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               US2003225013-A1
                                                                       US2003225013-A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Homo sapiens
Homo sapiens.
                                                                                                                                      04-DEC-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ADH26774;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  RESULT 129
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Matches
```

```
ö
                                                                                                                                                                                                                                                                                                                                                           The invention relates to a compound targeted to a nucleic acid molecule encoding human phosphoinositide-3-kinase (PI3K) regulatory subunit 4, p150. The compound is an antisense oligonuclectide that specifically hybridises with a nucleic acid molecule encoding PI3K regulatory subunit 4, p150 and inhibits expression of the polypoptide. The antisense oligonuclectide comprises at least one modified internucleoside linkage
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      i.e. a phosphorothicate linkage, at least one modified sugar moiety, preferably a 2'-O-methoxyethyl sugar moiety, or at least one modified nucleobase comprising a 5-methylcytosine. The antisense compounds are useful for modulating the expression of PI3K regulatory subunit 4, p150 and for preventing or treating hyperproliferative disorders (i.e. cancer), Chediak-Higashi syndrome, neurodegenerative disorders and metabolic disorders. These may also be used in research and diagnostics and in preventing or delaying infection or inflammation. This sequence represents a PI3K regulatory subunit 4, p150 DNA antisense oligonucleotide target region of the invention.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Human; phosphoinositide-3-kinase regulatory subunit 4; p150; P13K; P13 kinase; ds; antisense oligonucleotide; phosphorothioate linkage; 2'-O-methoxyethyl sugar molety; 5-methylcytosine; hyperproliferative disorder; cancer; Chediak-Higashi syndrome; neurodegenerative disorder; metabolic disorders; inflammation; cytostatic; immunomodulator; neurodegenerative; antimicrobial;
                                                                                                                                                                                                                            New antisense oligonucleotides inhibiting the expression of phosphoinositide-3-kinase, regulatory subunit 4, p150, useful for preventing or treating diseases associated with the subunit, e.g.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Human PI3K regulatory subunit 4, p150 DNA target region #25.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ch 0.4%; Score 20; DB 1; Length 20; 1 Similarity 100.0%; Pred. No. 1.4e+02; 20; Conservative 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Sequence 20 BP; 9 A; 4 C; 6 G; 1 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                       Example 15; SEQ ID NO 109; 62pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1658 AAAAAGCCGAAGGAGACCT 1677
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AAAAAGCCGAAGGAGAGCCT
                                                                                                                                                                                                                                                                                        hyperproliferative disorders.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ADH26778 standard; DNA; 20 BP
                                     31-MAY-2002; 2002US-00160786.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        31-MAY-2002; 2002US-00160786.
                                                                           31-MAY-2002; 2002US-00160786
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           (first entry)
                                                                                                               (ISIS-) ISIS PHARM INC
                                                                                                                                                  Dobie KW;
                                                                                                                                                                                        WPI; 2004-051923/05.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    antiinflammatory
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             JS2003225013-A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           11-MAR-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         sapiens
   04-DEC-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   04-DEC-2003
                                                                                                                                                    Freier SM,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ADH26778;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          RESULT 130
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Ношо
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ADH2677
ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            g
```

```
The invention relates to a compound targeted to a nucleic acid molecule encoding human phosphoinositide-3-kinase (PI3K) regulatory subunit 4, p150 molecule is an antisense oligonucleotide that specifically hybridises with a nucleic acid molecule encoding PI3K regulatory subunit 4, p150 and inhibits expression of the polypeptide. The antisense oligonucleotide comprises at least one modified internucleoside linkage i.e. a phosphorothioate linkage, at least one modified sugar moiety, preferably a 2'-O-methoxyethyl sugar moiety, or at least one modified nucleobase comprising a 5-methylcytosine. The antisense compounds are useful for modulating the expression of PI3K regulatory subunit 4, p150 and for preventing or treating hyperproliferative disorders and metabolic disorders. These may also be used in research and diagnostics and in preventing or delaying infection or inflammation. This sequence represents a P13K regulatory subunit 4, p150 DNA antisense
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   PI3 kinase; de; antisense oligonuclectide; phosphorochioate linkage; 2'-O-methoxyethyl sugar moiety; 5-methylcytosine; hyperproliferative disorder; cancer; Chediak-Higashi syndrome; neurodegenerative disorder; metabolic disordere; inflammation; cytostatic; immunomodulator; neurodegenerative; antimicrobial;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Human; phosphoinositide-3-kinase regulatory subunit 4; p150; PI3K;
                                                                                                                                            New antisense oligonucleotides inhibiting the expression of phosphoinositide-3-kinase, regulatory subunit 4, p150, useful for preventing or treating diseases associated with the subunit, e.g. hyperproliferative disorders.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Human PI3K regulatory subunit 4, p150 DNA target region #29.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         0.4%; Score 20; DB 1; Length 20; 100.0%; Pred. No. 1.4e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Sequence 20 BP; 8 A; 4 C; 3 G; 5 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             100.0%; Pred. No. 1.4 ive 0; Mismatches
                                                                                                                                                                                                                                          Example 15; SEQ ID NO 113; 62pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   2080 CTTAATATGGAAAATGACCC 2099
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CTTAATATGGAAAATGACCC 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ADH26782 standard; DNA; 20 BP
31-MAY-2002; 2002US-00160786.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       31-MAY-2002; 2002US-00160786.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        31-MAY-2002; 2002US-00160786
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           11-MAR-2004 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Matches 20; Conservative
                                   (ISIS-) ISIS PHARM INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               (ISIS-) ISIS PHARM INC.
                                                                        Dobie KW;
                                                                                                         WPI; 2004-051923/05.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    antiinflammatory
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             US2003225013-A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Ното варіепв.
                                                                        Freier SM,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ADH26782;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Query Match
셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ઠ
```

```
ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ö
                                                                                                                                                                    The invention relates to a compound targeted to a nucleic acid molecule encoding human phosphoinositide-3-kinase (F13K) regulatory subunit 4, p150. The compound is an antisense oligomucleotide that specifically hybridises with a nucleic acid molecule encoding P13K regulatory subunit 4, p150 and inhibits expression of the polypeptide. The antisense oligomucleotide comprises at least one modified internucleoside linkage i.e. a phosphorothioate linkage, at least one modified sugar moiety, preferably a 2'-0-methoxyethyl sugar moiety, or at least one modified uncleobase comprising a 5-methyloytosine. The antisense compounds are useful for modulating the expression of P13K regulatory subunit 4, p150 and for preventing or treating hyperproliferative disorders (i.e. cancer). Chediat Higashi syndrome, neurodegenerative disorders and markets which where many all to be used in womenting.
                                                                                                                                                                                                                                                                                                                                                         cancer), Chediak-Higashi syndrome, neurodegenerative disorders and metabolic disorders. These may also be used in research and diagnostics and in preventing or delaying infection or inflammation. This sequence represents a P13K regulatory subunit 4, p150 DNA antisense oligonucleotide target region of the invention.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Human, phosphoinositide-3-kinase regulatory subunit 4; p150; p13K; p13 kinase; ds; antisense oligonucleotide; phosphorothioate linkage; 2'-0-methoxyethyl sugar moiety; 5-metholycytosine; hyperproliferative disorder; cancer; Chediak-Higashi syndrome; neurodegenerative disorder; metabolic disorders; inflammation; cytostatic; immunomodulator; neurodegenerative; antimicrobial;
                                                       New antisense oligonucleotides inhibiting the expression of phosphoinositide-3-kinase, regulatory subunit 4, p150, useful for preventing or treating diseases associated with the subunit, e.g. hyperproliferative disorders.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Human PI3K regulatory subunit 4, p150 DNA target region #32.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          0.4%; Score 20; DB 1; Length 20;
100.0%; Pred. No. 1.40+02;
Live 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                Sequence 20 BP; 5 A; 3 C; 5 G; 7 T; 0 U; 0 Other;
                                                                                                                                            Example 15; SEQ ID NO 117; 62pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 2524 GITTACGAATTIGCCAGIGA 2543
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   BP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           31-MAY-2002; 2002US-00160786.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              31-MAY-2002; 2002US-00160786
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ADH26785 standard; DNA; 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   20; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            (ISIS-) ISIS PHARM INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Dobie KW;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         WPI; 2004-051923/05.
                                   WPI; 2004-051923/05.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Best Local Similarity
Matches 20; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       antiinflammatory
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    US2003225013-A1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            11-MAR-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  04-DEC-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Freier SM,
      Freier SM,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ADH26785;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                RESULT 132
ADH26785
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  셤
```

```
The invention relates to a compound targeted to a nucleic acid molecule encoding human phosphoinositide-3-kinase (PI3K) regulatory subunit 4, p150. The compound is an antisense oligonucleotide that specifically typications with a nucleic acid molecule encoding PI3K regulatory subunit 4, p150 and inhibits expression of the polypeptide. The antisense oligonucleotide comprises at least one modified internucleoside linkage i.e. a phosphorothioate linkage, at least one modified sugar moiety, preferably a 2'-O-methoxyethyl sugar moiety, or at least one modified nucleobase comprising a 5-methylcytosine. The antisense compounds are uncleobase comprising the expression of P13K regulatory subunit 4, p150 and for preventing or treating hyperproliferative disorders and match or preventing or treating hyperproliferative disorders and metabolic disorders. These may also be used in research and diagnostics and in preventing or delaying infection or inflammation. This sequence represents a P13K regulatory subunit 4, p150 DNA antisense
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Human; phosphoinositide-3-kinase regulatory subunit 4; p150; P13K; p13 kinase; ds; antisense oligonucleotide; phosphorothioate linkage; 2'-O-methoxyethyl sugar moiety; 5-methoxyetosine; hyperproliferative disorder; cancer; Chediak-Higashi syndrome; neurodegenerative disorder; metabolic disorders; inflammation; cytostatic; immunomodulator; neurodegenerative; antimicrobial;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  New antisense oligonucleotides inhibiting the expression of phosphoinositide-3-kinase, regulatory subunit 4, p150, useful for preventing or treating diseases associated with the subunit, e.g. hyperproliferative disorders.
                                              e.g.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ö
                 phosphoinositide.3-kinase, regulatory subunit 4, p150, useful preventing or treating diseases associated with the subunit, e
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Human PI3K regulatory subunit 4, p150 DNA target region #46.
New antisense oligonucleotides inhibiting the expression of
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Length 20;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Sequence 20 BP; 6 A; 4 C; 4 G; 6 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    0.4%; Score 20; DB 1; Le
100.0%; Pred. No. 1.4e+02;
ive 0; Mismatches 0;
                                                                                                                  Example 15; SEQ ID NO 120; 62pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     2731 GAACCAGTAAGTCGTTCTAT 2750
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                31-MAY-2002; 2002US-00160786.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            31-MAY-2002; 2002US-00160786.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   100.08;
                                                                         hyperproliferative disorders.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ADH26799 standard; DNA; 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              11-MAR-2004 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Query Match 0.4
Best Local Similarity 100.
Matches 20; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          (ISIS-) ISIS PHARM INC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Dobie KW;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  WPI; 2004-051923/05.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 antiinflammatory.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         US2003225013-A1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    04-DEC-2003.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Freier SM,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ADH26799;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             RESULT 133
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ADH26799
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           원
```

```
ADH26803;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          RESULT 135
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         4DH26803
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            à
   8888888888888888888888888
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             쉱
                                                                            The invention relates to a compound targeted to a nucleic acid molecule encoding human phosphoinositide-3-kinase (FI3K) regulatory subunit 4, p150. The compound is an antisense oligonucleotide that specifically hybridises with a nucleic acid molecule encoding FI3K regulatory subunit 4, p150 and inhibits expression of the polypeptide. The antisense oligonucleotide comprises at least one modified internucleoside linkage i.e. a phosphorothioate linkage, at least one modified sugar moiety, preferably a 2'-O-methoxyethyl sugar moiety, or at least one modified nucleobase comprising a 5-methylcytosine. The antisense compounds are useful for modulating the expression of FI3K regulatory subunit 4, p150 and for preventing or treating hyperproliferative disorders and metabolic disorders. These may also be used in research and diagnostics and in preventing or delaying infection or inflammation. This sequence represents a P13K regulatory subunit 4, p150 DNA antisense
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      The invention relates to a compound targeted to a nucleic acid molecule
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    0; Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            PI3 kinase; ds; antisense oligonuclectide; phosphorothioate linkage; 2'-0-methoxyethyl sugar moiety; 5-methylcytosine; hyperproliferative disorder; cancer; Chediak-Higashi syndrome; neurodegenerative disorder; metabolic disorders; inflammation;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Human; phosphoinositide-3-kinase regulatory subunit 4; p150; P13K;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           New antisense oligonucleotides inhibiting the expression of phosphoinositide-3-kinase, regulatory subunit 4, p150, useful for preventing or treating diseases associated with the subunit, e.g.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             cytostatic; immunomodulator; neurodegenerative; antimicrobial;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Human PI3K regulatory subunit 4, p150 DNA target region #48
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Score 20; DB 1; Length 20;
Pred. No. 1.4e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Sequence 20 BP; 4 A; 5 C; 2 G; 9 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       0.4%; Sco...
100.0%; Pred. No. ...
0; Mismatches
                           Example 15; SEQ ID NO 134; 62pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sxample 15; SEQ ID NO 136; 62pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           3583 TCACTTTTGCAACATGTTC 3602
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1 TCACTTTTTGCAACATGTTC 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ВВ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       31-MAY-2002; 2002US-00160786.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       hyperproliferative disorders.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             31-MAY-2002; 2002US-00160786
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ADH26801 standard; DNA; 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  (ISIS-) ISIS PHARM INC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Freier SM, Dobie KW;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Local Similarity
ses 20; Conserva
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   WPI; 2004-051923/05.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         antiinflammatory.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           US2003225013-A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        11-MAR-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  04-DEC-2003.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ADH26801;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            RESULT 134
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ADH26801

ID ADH26801

ID ADH4061

ID ADH4
셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ઠ
```

```
encoding human phosphoinositide-3-kinase (PI3K) regulatory subunit 4, pl50. The compound is an antisense oligonucleotide that specifically converse and inhibits expression of the polypeptide. The antisense oligonucleotide comprises at least one modified. The antisense oligonucleotide comprises at least one modified internucleoside linkage i.e. a phosphorothioate linkage, at least one modified sugar molety, preferably a 2-O-methoxyethyl sugar molety, or at least one modified nucleobase comprising a 5-methylcytosine. The antisense compounds are useful for modulating the expression of F13K regulatory subunit 4, pl50 and for preventing or treating hyperproliferative disorders and metablic disorders. These may also be used in research and diagnostics metabolic disorders. These may also be used in research and diagnostics mod in preventing or delaying infection or inflammation. This sequence represents a PI3K regulatory subunit 4, pl50 DNA antisense
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ô
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       The invention relates to a compound targeted to a nucleic acid molecule encoding human phosphoinositide-3-kinase (PI3K) regulatory subunit 4, p150. The compound is an antisense oligonucleotide that specifically hybridises with a nucleic acid molecule encoding P13K regulatory subunit 4, p150 and inhibits expression of the polypeptide. The antisense
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Gaрв
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Human; phosphoinositide-3-kinase regulatory subunit 4; p150; P13K; P13 kinase; ds; antisense oligonucleotide; phosphorothioate linkage; 2'-O-methoxyethyl sugar moiety; 5-methylcytosine; hyperproliferative disorder; cancer; Chediak-Higashi syndrome; neurodegenerative disorder; metabolic disorder; inflammation; cytostatic; immunomodulator; neurodegenerative; antimicrobial;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              New antisense oligonucleotides inhibiting the expression of phosphoinositide-3-kinase, regulatory subunit 4, p150, useful for preventing or treating diseases associated with the subunit, e.g. hyperproliferative disorders.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Human PI3K regulatory subunit 4, p150 DNA target region #50.
                                                                                                                                                                                                                                                                                                                                                                                                                                        DB 1; Length 20;
1.4e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Indels
                                                                                                                                                                                                                                                                                                                                                                                             Sequence 20 BP; 2 A; 6 C; 4 G; 8 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                           oligonucleotide target region of the invention.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Example 15; SEQ ID NO 138; 62pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                        0.4%; Score 20;
100.0%; Pred. No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         3899 TICTIGCCTATGCCACTGTG 3918
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1 Trcrrcccrargccacrerg 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ADH26803 standard; DNA; 20 BP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             31-MAY-2002; 2002US-00160786.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 100.0%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             31-MAY-2002; 2002US-00160786
                                                                                                                                                                                                                                                                                                                                                                                                               Query Match
Best Local Similarity 100....
Local Similarity 100...
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       11-MAR-2004 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         (ISIS-) ISIS PHARM INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Dobie KW;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      WPI; 2004-051923/05.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     antiinflammatory.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              US2003225013-A1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              04-DEC-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Freier SM,
```

```
ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                The invention relates to a compound targeted to a nucleic acid molecule encoding human phosphoinositide-3-kinase (P13K) regulatory subunit 4, p150. The compound is an antisense oligonucleotide that specifically hybridises with a nucleic acid molecule encoding P13K regulatory subunit 4, p150 and inhibits expression of the polypeptide. The antisense oligonucleotide comprises at least one modified internucleoside linkage i.e. a phosphorothicate linkage, at least one modified sugar moiety, preferably a 2'-0-methoxyethyl sugar moiety, or at least compounds are nucleobase comprising a 5-methylcytosine. The antisense compounds are
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Human PI3K regulatory subunit 4, p150 DNA antisense oligonucleotide #11.
                i.e. a phosphorothioate linkage, at least one modified sugar moiety, preferably a 2'-O-methoxyethyl sugar moiety, or at least one modified nucleobase comprising a 5-methylcytosine. The antisense compounds are useful for modulating the expression of PISK regulatory subunit 4, pl50 and for preventing or treating hyperproliferative disorders (i.e. cancer), Chediak-Higashi syndrome, neurodegenerative disorders and
                                                                                                                                     metabolic disorders. These may also be used in research and diagnostics and in preventing or delaying infection or inflammation. This sequence represents a PI3K regulatory subunit 4, p150 DNA antisense oligonucleotide target region of the invention.
oligonucleotide comprises at least one modified internucleoside linkage
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Human; phosphoinositide-3-kinase regulatory subunit 4; p150; P13K; p13 kinase; ss; antisense oligonucleotide; phosphorothioate linkage; 2'-O-methoxyethyl sugar moiety; 5-methylcytosine; hyperproliferative disorder; cancer; Chediak-Higashi syndrome; neurodegenerative disorder; metabolic disorders; inflammation; cytostatic; immunomodulator; neurodegenerative; antimicrobial;
                                                                                                                                                                                                                                                                                                                         Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               phosphoinositide 3-kinase, regulatory subunit 4, p150, useful for preventing or treating diseases associated with the subunit, e.g.
                                                                                                                                                                                                                                                                                                                         .
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              New antisense oligonucleotides inhibiting the expression of
                                                                                                                                                                                                                                                                               Score 20; DB 1; Length 20;
Pred. No. 1.4e+02;
                                                                                                                                                                                                                                                                                                                       0; Indels
                                                                                                                                                                                                                                       Sequence 20 BP; 3 A; 4 C; 6 G; 7 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                       0.4%; Scor.
100.0%; Pred. No. 1...
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Example 15; SEQ ID NO 21; 62pp; English.
                                                                                                                                                                                                                                                                                                                                                              4050 CAGTGGTACCATGGCTTGTT 4069
                                                                                                                                                                                                                                                                                                                                                                                                      1 cagredraccarderrerr 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ADH26686 standard; DNA; 20 BP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           hyperproliferative disorders.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                31-MAY-2002; 2002US-00160786.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      31-MAY-2002; 2002US-00160786
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      (first entry)
                                                                                                                                                                                                                                                                                                      1 Similarity 100.
20; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                (ISIS-) ISIS PHARM INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Dobie KW;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             WPI; 2004-051923/05.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          antiinflammatory.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     US2003225013-A1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        11-MAR-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             04-DEC-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Freier SM,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ADH26686;
                                                                                                                                                                                                                                                                                     Query Match
                                                                                                                                                                                                                                                                                                            Best Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     RESULT 136
                                                                                                                                                                                                                                                                                                                             Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             888888888888888
                                                                                                                                                                                                                                                                                                                                                                     à
                                                                                                                                                                                                                                                                                                                                                                                                      셤
```

```
The invention relates to a compound targeted to a nucleic acid molecule encoding human phosphoinositide-3-kinase (PI3K) regulatory subunit 4, plso more monothing is an antisense oligonucleotide that specifically hybridises with a nucleic acid molecule encoding Pi3K regulatory subunit 4, plso and inhibits expression of the polypeptide. The antisense oligonucleotide comprises at least one modified internucleoside linkage i.e. a phosphorothioate linkage, at least one modified sugar moiety, preferably a 2'-O-methoxyethyl sugar moiety, or at least one modified nucleobase comprising a 5-methylcytosine. The antisense compounds are useful for modulating the expression of Pi3K regulatory subunit 4, plso and for preventing or treating hyperproliferative disorders and metabolic disorders. These may also be used in research and diagnostics and in preventing or delaying infection or inflammation. This sequence
                                                                                                                                                                                                                               ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Human P13K regulatory subunit 4, p150 DNA antisense oligonucleotide #12.
useful for modulating the expression of P13K regulatory subunit 4, p150 and for preventing or treating hyperproliferative disorders (i.e. cancer), Chediak-Higashi syndrome, neurodegenerative disorders and metabolic disorders. These may also be used in research and diagnostics and in preventing or delaying infection or inflammation. This sequence represents an antisense oligonucleotide of the invention.
                                                                                                                                                                                                                               Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Human; phosphoinositide-3-kinase regulatory subunit 4; p150; P13K; P13 kinase; ss; antisense oligonuclectide; phosphorothioate linkage; 2'-O-methoxyethyl sugar moiety; 5-methylcytosine; hyperproliferative disorder; cancer; Chediak-Higashi syndrome; neurodegenerative disorder; metabolic disorders; inflammation; cytostatic; immunomodulator; neurodegenerative; immunomodulator; neurodegenerative; antimicrobial; antinilammatory.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            New antisense oligonucleotides inhibiting the expression of phosphoinositide-3-kinase, regulatory subunit 4, p150, useful for preventing or treating diseases associated with the subunit, e.g. hyperproliferative disorders.
                                                                                                                                                                                                                               ö
                                                                                                                                                                                  / Match 0.4%; Score 20; DB 1; Length 20; Local Similarity 100.0%; Pred. No. 1.4e+02; nes 20; Conservative 0; Mismatches 0; Indels
                                                                                                                                                Sequence 20 BP; 2 A; 7 C; 3 G; 8 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Example 15; SEQ ID NO 22; 62pp; English.
                                                                                                                                                                                                                                                                       780 GGAGGAACTGAAATCAGGC 799
                                                                                                                                                                                                                                                                                                 GGAGGAACTGAAAATCAGGC 1
                                                                                                                                                                                                                                                                                                                                                                                                                   BP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   31-MAY-2002; 2002US-00160786.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         31-MAY-2002; 2002US-00160786
                                                                                                                                                                                                                                                                                                                                                                                                               ADH26687 standard; DNA; 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 (ISIS-) ISIS PHARM INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Dobie KW;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              WPI; 2004-051923/05.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      US2003225013-A1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    11-MAR-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 04-DEC-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Freier SM,
                                                                                                                                                                                                                                                                                                                                                                                                                                                            ADH26687;
                                                                                                                                                                                                                                                                                                               20
                                                                                                                                                                                           Query Match
                                                                                                                                                                                                                                                                                                                                                                             RESULT 137
                                                                                                                                                                                                                                 Matches
                                                                                                                                                                                                                                                                                                                                                                                                    ADH26687,
                                                                                                                                                                                                                                                                                                                                                                                                                        88888888888
                                                                                                                                                                                                                                                                                                               g
                                                                                                                                                                                                                                                                             ð
```

gibbs-10-667-022-4.rng

Pred. No. 1.4e+02;

100.0%;

Best Local Similarity

```
ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              The invention relates to a compound targeted to a nucleic acid molecule encoding human phosphoinositide-3-kinase (P13K) regulatory subunit 4, p150. The compound is an antisense oligonucleotide that specifically hybridises with a nucleic acid molecule encoding P13K regulatory subunit 4, p150 and inhibits expression of the polypeptide. The antisense oligonucleotide comprises at least one modified internucleoside linkage i.e. a phosphorothioate linkage, at least one modified internucleoside linkage preferably a 2'-0-methoxyethyl sugar moiety, or at least one modified nucleobase comprising a 5-methylcytosine. The antisense compounds are useful for modulating the expression of P13K regulatory subunit 4, p150 and for preventing or treating hyperproliferative disorders and cancer.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Human PI3K regulatory subunit 4, p150 DNA antisense oligonucleotide #24.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    cancer), Chediak-Higashi syndrome, neurodegenerative disorders and metabolic disorders. These may also be used in research and diagnostics and in preventing or delaying infection or inflammation. This sequence represents an antisense oligonucleotide of the invention.
                                                                                                                                                                                                       Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Human; phosphoinositide-3-kinase regulatory subunit 4; p150; p13K; p13 kinase; ss; antisense oligonucleotide; phosphorothioate linkage; 2'-O-methoxyethyl sugar moiety; 5-methylcytosine; hyperproliferative disorder; cancer; Chediak-Higashi syndrome; neurodegenerative disorder; metabolic disorders; inflammation; cytostetic; immunomodulator; neurodegenerative; antimicrobial;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  New antisense oligonucleotides inhibiting the expression of phosphoinositide-3-kinase, regulatory subunit 4, p150, useful for preventing or treating diseases associated with the subunit, e.g. hyperproliferative disorders.
                                                                                                                                                                                                       ö
   represents an antisense oligonucleotide of the invention.
                                                                                                                                       Length 20;
                                                                                                                                                                                                       0; Indels
                                                                Sequence 20 BP; 4 A; 3 C; 5 G; 8 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Sequence 20 BP; 5 A; 4 C; 3 G; 8 T; 0 U; 0 Other;
                                                                                                                                Score 20; DB 1; Le
Pred. No. 1.4e+02;
                                                                                                              0.4%; Scc...
100.0%; Pred. No. ...
0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Example 15; SEQ ID NO 34; 62pp; English.
                                                                                                                                                                                                                                                                           843
                                                                                                                                                                                                                                                                                                           CTTTCCAGAAGCATCAGAA 1
                                                                                                                                                                                                                                                                           CTTTCCAGAAAGCATCAGAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   뮵
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 31-MAY-2002; 2002US-00160786.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  31-MAY-2002; 2002US-00160786.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ADH26699 standard; DNA; 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   11-MAR-2004, (first entry)
                                                                                                              Query Match
Best Local Similarity 100.0
wrthes 20, Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     (ISIS-) ISIS PHARM INC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Freier SM, Dobie KW;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             WPI; 2004-051923/05.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          antiinflammatory.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              US2003225013-A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              04-DEC-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ADH26699;
                                                                                                                                                                                                                                                                                                                                        20
                                                                                                                                                                                                                                                                                                                                                                                                                                        RESULT 138
ADH26699/C
XX
AC ADH26659/C
XX
AC ADH2665
XX
DE Human |
XX
Human |
SXS
                                                                                                                                                                                                                                                                           ઠ
                                                                                                                                                                                                                                                                                                                                셤
```

0.4%; Score 20; DB 1; Length 20;

Query Match

```
ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  The invention relates to a compound targeted to a nucleic acid molecule encoding human phosphoinositide-3-kinase (PI3K) regulatory subunit 4, p150. The compound is an antisense oligonucleotide that specifically hybridises with a nucleic acid molecule encoding PI3K regulatory subunit 4, p150 and inhibits expression of the polypeptide. The antisense oligonucleotide comprises at least one modified internucleoside linkage i.e. a phosphorotrhiose linkage, at least one modified sugar molecy, preferably a 2-0-methoxyethyl sugar molecy, or at least one modified nucleobase comprising a 5-methylcytosine. The antisense compounds are useful for modulating the expression of PI3K regulatory subunit 4, p150 and for preventing or treating hyperproliferative disorders (i.e., and for preventing or treating hyperproliferative disorders (i.e., and for preventing or treating hyperproliferative)
                                                                                                                                                                                                                                                                                          Human PI3K regulatory subunit 4, p150 DNA antisense oligonucleotide #25.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        cancer), Chediak-Higashi syndrome, neurodegenerative disorders and metabolic disorders. These may also be used in research and disgnostics and in preventing or delaying infection or inflammation. This sequence represents an antisense oligonucleotide of the invention.
  Gape
                                                                                                                                                                                                                                                                                                                            Human, phosphoinositide-3-kinase regulatory subunit 4; p150; P118; P13 kinase; ss; antisense oligonucleotide; phosphorothioate linkage; 2'-O-methoxyethyl sugar moiety; 5-methylcytosine; hyperproliferative disorder; cancer; Chediak-Higashi syndrome; neurodegenerative disorder; metabolic disorder; inflammation; cytostatic; immunomodulator; neurodegenerative; antimicrobial;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Gapa
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               New antisense oligonucleotides inhibiting the expression of phosphoinositide-3-kinase, regulatory subunit 4, p150, useful for preventing or treating diseases associated with the subunit, e.g. hyperproliferative disorders.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ö
  ô
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             0.4%; Score 20; DB 1; Length 20;
100.0%; Pred. No. 1.4e+02;
    Indele
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Sequence 20 BP; 4 A; 5 C; 6 G; 5 T; 0 U; 0 Other;
    ô
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             / Match
Local Similarity 100.0%; Pred. NO. 1.1-
    0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Example 15; SEQ ID NO 35; 62pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1441 CAGATGATTCACCGTGAGCC 1460
                                      1414 GATCACAGTATCAGAGAATT 1433
                                                              GATCACAGTATCAGAGAATT 1
                                                                                                                                                                         BP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          31-MAY-2002; 2002US-00160786.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            31-MAY-2002; 2002US-00160786
                                                                                                                                                                           ADH26700 standard; DNA; 20
                                                                                                                                                                                                                                                   (first entry)
  20; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   (ISIS-) ISIS PHARM INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               WPI; 2004-051923/05.
                                                                                                                                                                                                                                                                                                                                                                                                                                                   antiinflammatory.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             US2003225013-A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Homo sapiens
                                                                                                                                                                                                                                                   11-MAR-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Freier SM,
                                                                                                                                                                                                             ADH26700;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Matches
Matches
                                                                                                                                                   ADH26700/
                                                                                                                                                                                           ò
                                                                        g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ð
```

BP.

(first entry)

쇰

```
Human P13K regulatory subunit 4, p150 DNA antisense oligonucleotide #36.
                                                                                                               Human; phosphoinositide-3-kinase regulatory subunit 4; p150; P13K; P13 kinase; ss; antisense oligonucleotide; phosphorothioate linkage; 2'-0-methoxyethyl sugar moiety; 5-methylcytosine; hyperproliferative disorder; cancer; Chediak-Higashi syndrome; neurodegenerative disorder; metabolic disorder; inflammation; cytostatic; immunomodulator; neurodegenerative; antimicrobial; antiinflammatory.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      New antisense oligonucleotides inhibiting the expression of phosphoinositide-3-kinase, regulatory subunit 4, p150, useful for preventing or treating diseases associated with the subunit, e.g. hyperproliferative disorders.
                                                                                                                                                                                                                                                                                                                                                                         31-MAY-2002; 2002US-00160786.
                                                                                                                                                                                                                                                                                                                                           31-MAY-2002; 2002US-00160786.
ADH26711 standard; DNA; 20
                                                                                                                                                                                                                                                                                  US2003225013-A1.
                                                                                                                                                                                                                                                     Homo sapiens.
                                                              11-MAR-2004
                                                                                                                                                                                                                                                                                                               04-DEC-2003
                                ADH26711;
   ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       The invention relates to a compound targeted to a nucleic acid molecule encoding human phosphoinositide-3-kinase (PI3K) regulatory subunit 4, p150. The compound is an antisense oligonucleotide that specifically hyptidises with a nucleic acid molecule encoding PI3K regulatory subunit hyptonical inhibits expression of the polypeptide. The antisense oligonucleotide comprises at least one modified internucleoside linkage i.e. a phosphorothicate linkage, at least one modified sugar moiety, preferably a 2'-O-methoxyethyl sugar moiety, or at least one modified nucleobase comprising a 5-methylytrosine. The antisense compounds are useful for modulating the expression of PI3K regulatory subunit 4, p150 and for preventing or treathing hyperproliferative disorders and metabolic disorders. These may also be used in research and diagnostics and in preventing or delaying infection or inflammation. This sequence
                                                                                                                                                                           Human PI3K regulatory subunit 4, p150 DNA antisense oligonucleotide #30.
                                                                                                                                                                                                     Human; phosphoinositide-3-kinase regulatory subunit 4; p150; P13K; P13 kinase; ss; antisense oligonucleotide; phosphorothioate linkage; 2'-0-methoxyethyl sugar moiety; 5-methylcytosine; hyperproliferative disorder; cancer; Chedlak-Higashi syndrome; neurodegenerative disorder; metabolic disorders; inflammation; cytostatic; immunomodulator; neurodegenerative; antimicrobial;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               phosphoinositide-3-kinase, regulatory subunit 4, p150, useful for preventing or treating diseases associated with the subunit, e.g.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       antisense oligonucleotides inhibiting the expression of
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Score 20; DB 1; Length 20;
Pred. No. 1.4e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                represents an antisense oligonucleotide of the invention.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Sequence 20 BP; 1 A; 6 C; 4 G; 9 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   0.4%; Scor.
100.0%; Pred. No. ...
0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Example 15; SEQ ID NO 40; 62pp; English.
           20 CAGATGATTCACCGTGAGCC 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      hyperproliferative disorders.
                                                                                    ADH26705 standard; DNA; 20 BP
                                                                                                                                                                                                                                                                                                                                                                                                                                                               31-MAY-2002; 2002US-00160786.
                                                                                                                                                                                                                                                                                                                                                                                                                                31-MAY-2002; 2002US-00160786.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Query Match 0.4°
Best Local Similarity 100.
Matches 20; Conservative
                                                                                                                                                   (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              (ISIS-) ISIS PHARM INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Dobie KW;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         WPI; 2004-051923/05.
                                                                                                                                                                                                                                                                                                            antiinflammatory
                                                                                                                                                                                                                                                                                                                                                                       US2003225013-A1.
                                                                                                                                                                                                                                                                                                                                          Homo sapiens.
                                                                                                                                                    11-MAR-2004
                                                                                                                                                                                                                                                                                                                                                                                                      04-DEC-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Freier SM,
                                                                                                                    ADH26705;
```

(ISIS-) ISIS PHARM INC.

Dobie KW;

Freier SM,

WPI; 2004-051923/05.

```
The invention relates to a compound targeted to a nucleic acid molecule encoding human phosphoinositide-3-kinase (PI3K) regulatory subunit 4, pl50. The compound is an antisense oligonucleoride that specifically pl50. The compound is an antisense oligonucleoride that specifically hybridises with a nucleic acid molecule encoding PI3K regulatory subunit 4, pl50 and inhibits expression of the polypeptide. The antisense oligonucleoride comprises at least one modified internucleoside linkage i.e. a phosphorothioate linkage, at least one modified sugar moiety, preferably a 2'-O-methoxyethy! sugar moiety, or at least one modified nucleobase comprising a 5-methyLytosine. The antisense compounds are nucleobase comprising the expression of PI3K regulatory subunit 4, pl50 and for preventing or treating hyperproliferative disorders (i.e. cancer), Chediak-Higashi syndrome, neurodegenrative disorders and ain in preventing or delaying infection or inflammation. This sequence represents an antisense oligonucleotide of the invention.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ..
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           0.4%; Score 20; DB 1; Length 20;
100.0%; Pred. No. 1.40+02;
tive 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Sequence 20 BP; 4 A; 3 C; 4 G; 9 T; 0 U; 0 Other;
Example 15; SEQ ID NO 46; 62pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  2131 CCAAATGGAAATTATGACAC 2150
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CCAATGGAATTATGACAC 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ADH26763 standard; DNA; 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        11-MAR-2004 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Local Similarity 100.
nes 20; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ADH26763;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      RESULT 142
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ADH26763
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           셤
```

ö

Gaps

. 0

Indels

ઠે

RESULT 141 ADH26711/c

```
The invention relates to a compound targeted to a nucleic acid molecule encoding human phosphoinositide-3-kinase (P13K) regulatory subunit 4, p150. The compound is an antisense oligonucleotide that specifically hybridises with a nucleic acid molecule encoding P13K regulatory subunit 4, p150 and inhibits expression of the polypeptide. The antisense oligonucleotide comprises at least one modified internucleoside linkage i.e. a phosphorothioate linkage, at least one modified internucleoside internucleoside nucleobase comprising a 5-methylcytosine. The antisense compounds are useful for modulating the expression of P13K regulatory subunit 4, p150 and for preventing or treating hyperproliferative disorders (i.e. cancer), Chediak-Higaahi syndrome, neurodegenerative disorders and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        cancer), Chediak-Higashi syndrome, neurodegenerative disorders and metabolic disorders. These may also be used in research and diagnostics and in preventing or delaying infection or inflammation. This sequence represents a PI3K regulatory subunit 4, p150 DNA antisense oligonucleotide target region of the invention.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Gaps
                                                                       PI3 kinase; ds; antisense oligonucleotide; phosphorothicate linkage; 2'-O-methoxyethyl sugar molety; 5-methylcytosine; hyperproliferative disorder; cancer; Chediak-Higashi syndrome; neurodegenerative disorder; metabolic disorders; inflammation;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Human; phosphoinositide-3-kinase regulatory subunit 4; p150; PI3K;
                                                         phosphoinositide-3-kinase regulatory subunit 4; p150; PI3K;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   phosphoinositide 3-kinase, regulatory subunit 4, p150, useful for preventing or treating diseases associated with the subunit, e.g.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ö
                                                                                                                                                         cytostatic; immunomodulator; neurodegenerative; antimicrobial;
                    Human PI3K regulatory subunit 4, p150 DNA target region #10.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   New antisense oligonucleotides inhibiting the expression of
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Human PI3K regulatory subunit 4, p150 DNA target region #30
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Score 20; DB 1; Length 20;
Pred. No. 1.4e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Sequence 20 BP; 6 A; 3 C; 7 G; 4 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                100.0%; Prec. ...
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Example 15; SEQ ID NO 98; 62pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               GGCAGTATGTGCGAGACAAT 894
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      GGCAGTATGTGCGAGACAAT 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ADH26783 standard; DNA; 20 BP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              hyperproliferative disorders.
                                                                                                                                                                                                                                                                                                                                   31-MAY-2002; 2002US-00160786
                                                                                                                                                                                                                                                                                                                                                                         31-MAY-2002; 2002US-00160786
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Local Similarity 100.
nes 20; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                            (ISIS-) ISIS PHARM INC
                                                                                                                                                                                                                                                                                                                                                                                                                                                     Dobie KW;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            WPI; 2004-051923/05.
                                                                                                                                                                         antiinflammatory.
                                                                                                                                                                                                                                                       US2003225013-A1
                                                                                                                                                                                                                  ното варіеля
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    11-MAR-2004
                                                                                                                                                                                                                                                                                            04-DEC-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                     Freier SM,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               875
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ADH26783;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Query Match
                                                           Human;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               RESULT 143
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ADH26783
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  a
8XCCCCCCCCCCCCCX8X44444X3X1X4X4X6X6X8X8X8X8X8X8X8X8X8X8X8X8X8X8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        2X2X2X2X2X
```

```
The invention relates to a compound targeted to a nucleic acid molecule encoding human phosphoinositide-3-kinase (PI3K) regulatory subunit 4, p150. The compound is an antisense oligonuclectide that specifically phyridises with a nucleic acid molecule encoding PI3K regulatory subunit 4, p150 and inhibits expression of the polypepide. The antisense oligonuclectide comprises at least one modified internucleoside linkage i.e. a phosphorothioate linkage, at least one modified sugar moiety, preferably a 2'-O-methoxyethyl sugar moiety, or at least one modified nucleobase comprising a 5-methylcytosine. The antisense compounds are useful for modilating the expression of PI3K regulatory subunit 4, p150 and for preventing or treating hyperproliferative disorders and metabolic disorders. These may also be used in research and disgnostics and in preventing or delaying infection or inflammation. This sequence represents a PI3K regulatory subunit 4, p150 DNA antisense
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Gape
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Human; phosphoinositide-3-kinase regulatory subunit 4; p150; P13K; P13 kinase; ds; antisense oligomucleotide; phosphorothioate linkage; 2'-0-methoxytethyl sugar moiety; 5-methylcytosine; hyperproliferative disorder; cancer; Chediak-Higashi syndrome; neurodegenerative disorder; metabolic disorders; inflammation;
PI3 kinase, ds; antisense oligonucleotide; phosphorothioate linkage;
                                                                                                                                                                                                                                                                                                                                                                                                                                  New antisense oligonucleotides inhibiting the expression of phosphoinositide-3-kinase, regulatory subunit 4, p150, useful for preventing or treating diseases associated with the subunit, e.g.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ö
             2'-O-methoxyethyl sugar mojety; 5-methylcytosine; hyperproliferative disorder; cancer; Chediak-Higashi syndrome; neurodegenerative disorder; metabolic disorders; inflammation; cytostatic; immunomodulator; neurodegenerative; antimicrobial; antinflammatory.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Human PI3K regulatory subunit 4, p150 DNA target region #33.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           0.4%; Score 20; DB 1; Length 20;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Sequence 20 BP; 4 A; 6 C; 2 G; 8 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1.46+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             100.0%; Pred. No. 1.4 cive 0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Example 15; SEQ ID NO 118; 62pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      2555 TCCTGTGTCATCCCAATTTA 2574
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TCCTGTGTCATCCCAATTTA 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       BP
                                                                                                                                                                                                                                                                                   31-MAY-2002; 2002US-00160786.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              hyperproliferative disorders.
                                                                                                                                                                                                                                              31-MAY-2002; 2002US-00160786
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ADH26786 standard; DNA; 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Conservative
                                                                                                                                                                                                                                                                                                                       (ISIS-) ISIS PHARM INC.
                                                                                                                                                                                                                                                                                                                                                             Dobie KW;
                                                                                                                                                                                                                                                                                                                                                                                                   WPI; 2004-051923/05.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Local Similarity
les 20; Conserv
                                                                                                                                                                  US2003225013-A1.
                                                                                                                                 Ното варіеня
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 11-MAR-2004
                                                                                                                                                                                                          04-DEC-2003
                                                                                                                                                                                                                                                                                                                                                             Freier SM,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ADH26786;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                RESULT 144
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Best Loca
Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ADH26786
셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ઠ
```

```
ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           The invention relates to a compound targeted to a nucleic acid molecule encoding human phosphoinositide-3-kinase (PI3K) regulatory subunit 4, p150. The compound is an antisense oligonucleotide that specifically hydridises with a nucleic acid molecule encoding PI3K regulatory subunit 4, p150 and inhibits expression of the polypeptide. The antisense oligonucleotide comprises at least one modified internucleoside linkage i.e. a phosphorothibate linkage, at least one modified sugar moiety, preferably a 2'-0-methoxyethyl sugar moiety, or at least one modified nucleobase comprising a 5-methylcytosine. The antisense compounds are useful for modulating the expression of F13K regulatory subunit 4, p150 and for preventing or treating hyperproliferative disorders and canner). Chediak-Higashi syndrome, neurodegenerative disorders and metabolic disorders. These may also be used in research and diagnostics metabolic disorders. These may also be used in research and diagnostics and in preventing or delaying infection or inflammation. This sequence represents a P13K regulatory subunit 4, p150 DNA antisense
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Human; phosphoinositide-3-kinase regulatory subunit 4; p150; P13K; p13 kinase; ds; antisense oligonucleotide; phosphorothioate linkage; 2'-0-methoxyethyl sugar moiety; 5-methylcytosine; hyperproliferative disorder; cancer; Chediak-Higashi syndrome; neurodegenerative disorder; metabolic disorders; inflammation; cytostatic; immunomodulator; neurodegenerative; antimicrobial;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Gaps
                                                                                                                                                                                                                                                    New antisense oligonucleotides inhibiting the expression of phosphoinositide-3-kinase, regulatory subunit 4, p150, useful for preventing or treating diseases associated with the subunit, e.g.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ;
0
 cytostatic; immunomodulator; neurodegenerative; antimicrobial;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Human PI3K regulatory subunit 4, p150 DNA target region #39.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               0.4%; Score 20; DB 1; Length 20; 100.0%; Pred. No. 1.4e+02; tive 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Sequence 20 BP; 3 A; 9 C; 5 G; 3 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                        Example 15; SEQ ID NO 121; 62pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       2843 GCCCTCCGCCAGAGGATCCT 2862
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1 GCCTCCGCCAGAGGATCCT 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ADH26792 standard; DNA; 20 BP
                                                                                                                                                                                                                                                                                               hyperproliferative disorders.
                                                                                                                        31-MAY-2002; 2002US-00160786
                                                                                                                                                   31-MAY-2002; 2002US-00160786.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Best Local Similarity 100.
Matches 20; Conservative
                                                                                                                                                                           (ISIS-) ISIS PHARM INC.
                                                                                                                                                                                                    Freier SM, Dobie KW;
                                                                                                                                                                                                                             WPI; 2004-051923/05.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     antiinflammatory.
                   antiinflammatory
                                                                        US2003225013-A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    11-MAR-2004
                                             Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ADH26792;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         RESULT 145
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Ношо
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ð
```

```
The invention relates to a compound targeted to a nucleic acid molecule encoding human phosphoinositide-3-kinase (PI3K) regulatory subunit 4, p150. The compound is an antisense oligonucleotide that specifically hybridises with a nucleic acid molecule encoding PI3K regulatory subunit 4, p150 and inhibits expression of the polypeptide. The antisense oligonucleotide comprises at least one modified internucleoside linkage oligonucleotide comprises at least one modified internucleoside linkage i.e. a phosphorothioate linkage, at least one modified sugar moiety, preferably a 2'-O-methoxyethyl sugar moiety, or at least one modified nucleobase comprising a 5-methylcytosine. The antisense compounds are nucleobase comprising the expression of P13K regulatory subunit 4, p150 and for preventing or treating hyperproliferative disorders (i.e. cancer), Chediak-Higashi syndrome, neurodegenerative disorders and and in preventing or delaying infection or inflammation. This sequence compressine a P13K regulatory subunit 4, p150 DNA antisense
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Human, phosphoinositide-3-kinase regulatory subunit 4; p150; P13K; p13 kinase; ds; antisense oligonucleotide; phosphorothioate linkage; 2'-0-methoxyethyl sugar moiety; 5-methoxyetosine; hyperproliferative disorder; cancer; Chediak-Higashi syndrome; neurodegenerative disorder; metabolic disorders; inflammation; cytostatic; immunomodulator; neurodegenerative; antimicrobial;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                       New antisense oligonucleotides inhibiting the expression of phosphoinositide-3-kinase, regulatory subunit 4, p150, useful for preventing or treating diseases associated with the subunit, e.g. hyperproliferative disorders.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Human PI3K regulatory subunit 4, p150 DNA target region #57.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Score 20; DB 1; Length 20;
Pred. No. 1.4e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Sequence 20 BP; 8 A; 4 C; 3 G; 5 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        oligonucleotide target region of the invention.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     0.4%; Scor.
100.0%; Pred. No. 1...
0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Example 15; SEQ ID NO 127; 62pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               3318 AAAACCAGTAATACCGGTTT 3337
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1 AAAACCAGTAATACCGGTTT 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ADH26810 standard; DNA; 20 BP.
                                                                                                                          31-MAY-2002; 2002US-00160786.
                                                                                                                                                                                         31-MAY-2002; 2002US-00160786.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           11-MAR-2004 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Best Local Similarity 100.
Matches 20; Conservative
                                                                                                                                                                                                                                                               (ISIS-) ISIS PHARM INC.
                                                                                                                                                                                                                                                                                                                                  Dobie KW;
                                                                                                                                                                                                                                                                                                                                                                                          WPI; 2004-051923/05.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             cytostatic; immur
antiinflammatory
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           US2003225013-A1.
JS2003225013-A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             04-DEC-2003.
                                                                  04-DEC-2003
                                                                                                                                                                                                                                                                                                                                  Freier SM,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ADH26810;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              RESULT 146
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ADH26810
```

```
셤
                                                                                                                                                                                                                                                                                                                                                                                                                                   ò
                                                                                                                                                                                                        The invention relates to a compound targeted to a nucleic acid molecule encoding human phosphoinositide-3-kinase (FI3K) regulatory subunit 4, p150 The compound is an antisense oligonucleotide that specifically hybridises with a nucleic acid molecule encoding P13K regulatory subunit 4, p150 and inhibits expression of the polypeptide. The antisense oligonucleotide comprises at least one modified internucleoside linkage i.e. a phosphorothioate linkage, at least one modified sugar moiety, preferably a 2'-O-methoxyethyl sugar moiety, or at least one modified nucleobase comprising the expression of F13K regulatory subunit 4, p150 and for preventing or treating hyperproliferative disorders and metabolic disorders. These may also be used in research and diagnostics and in preventing or delaying infection or inflammation. This sequence represents a P13K regulatory subunit 4, p150 DNA antisense
                                                                                                                                                                                                                                                                                                                                                                                                                                                          ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                          Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Human; phosphoinositide-3-kinase regulatory subunit 4; pi50; PIJK; PI3 kinase; ds; antisense oligonuclectide; phosphorothioate linkage; 2'-O-methoxyethyl sugar moiety; 5-methylcytosine; hyperproliferative disorder; cancer; Chediak-Higashi syndrome; neurodegenerative disorder; metabolic disorders; inflammation;
                                                                                                                          New antisense oligonucleotides inhibiting the expression of phosphoinositide-3-kinase, regulatory subunit 4, p150, useful for preventing or treating diseases associated with the subunit, e.g.
                                                                                                                                                                                                                                                                                                                                                                                                                                                          .
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   cytostatic; immunomodulator; neurodegenerative; antimicrobial;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Human PI3K regulatory subunit 4, p150 DNA target region #59.
                                                                                                                                                                                                                                                                                                                                                                                                                                  Score 20; DB 1; Length 20;
Pred. No. 1.4e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                         0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                            Seguence 20 BP; 9 A; 6 C; 2 G; 3 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                  / Match
Local Similarity 100.0%; Pred. No. 1.7
                                                                                                                                                                                   Example 15; SEQ ID NO 145; 62pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 4776 CTGACTAAATGACACCCAAA 4795
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CTGACTAAATGACACCCAAA 20
                                                                                                                                                             hyperproliferative disorders.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ADH26812 standard; DNA; 20 BP
            31-MAY-2002; 2002US-00160786.
                                 31-MAY-2002; 2002US-00160786.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 31-MAY-2002; 2002US-00160786.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            31-MAY-2002; 2002US-00160786
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              (first entry)
                                                       (ISIS-) ISIS PHARM INC
                                                                              Dobie KW;
                                                                                                    WPI; 2004-051923/05.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 antiinflammatory.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             US2003225013-A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              11-MAR-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    04-DEC-2003
                                                                              Freier SM,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ADH26812;
                                                                                                                                                                                                                                                                                                                                                                                                                                   Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            RESULT 147
                                                                                                                                                                                                                                                                                                                                                                                                                                                          Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     요
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ઠે
```

```
The invention relates to a compound targeted to a nucleic acid molecule encoding human phosphoinositide-3-kinase (PI3K) regulatory subunit 4, p150. The compound is an antisense oligonucleotide that specifically hybridises with a nucleic acid molecule encoding PI3K regulatory subunit 4, p150 and inhibits expression of the polypeptide. The antisense oligonucleotide comprises at least one modified internucleoside linkage i.e. a phosphorothioate linkage, at least one modified sugar molety, preferably a 2-0-methoxyethyl sugar molety, or at least one modified unseful for modulating the expression of PI3K regulatory subunit 4, p150 and for preventing or treating hyperproliferative disorders (i.e.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        cancer), Chediak-Higashi syndrome, neurodegenerative disorders and metabolic disorders. These may also be used in research and diagnostics and in preventing or delaying infection or inflammation. This sequence represents a Filk regulatory subunit 4, p150 DNA antisense
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Human PI3K regulatory subunit 4, p150 DNA antisense oligonucleotide #2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Gapa
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Human; phosphoinositide-3-kinase regulatory subunit 4; p150; P13K; P13 kinase; ss; antisense oligonucleotide; phosphorothioate linkage; 2'-0-methoxyethyl sugar moiety; 5-methyloytosine; hyperproliferative disorder; cancer; Chediak-Higashi syndrome; neurodegenerative disorder; metabolic disorders; inflammation; cytostatic; immunomodulator; neurodegenerative; antimicrobial;
                                                                                                                                                                                                                       New antisense oligonucleotides inhibiting the expression of phosphoinositide-3-kinase, regulatory subunit 4, p150, useful for preventing or treating diseases associated with the subunit, e.g.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ô
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           0.4%; Score 20; DB 1; Length 20; 100.0%; Pred. No. 1.4e+02; tive 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Sequence 20 BP; 4 A; 5 C; 3 G; 8 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                oligonucleotide target region of the invention.
                                                                                                                                                                                                                                                                                                                                                                                                                      Example 15; SEQ ID NO 147; 62pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           4823 CTTATGCATCTCTTTGCAAG 4842
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   criargearcrerrigeaag 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ВÞ.
                                                                                                                                                                                                                                                                                                                                          hyperproliferative disorders.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               31-MAY-2002; 2002US-00160786.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       31-MAY-2002; 2002US-00160786
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ADH26677 standard; DNA; 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     11-MAR-2004 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Query Match 0.4
Best Local Similarity 100.
Matches 20; Conservative
(ISIS-) ISIS PHARM INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           (ISIS-) ISIS PHARM INC.
                                                                           Freier SM, Dobie KW;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Dobie KW;
                                                                                                                                                   WPI; 2004-051923/05
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            antiinflammatory.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            JS2003225013-A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           04-DEC-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Freier SM,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ADH26677;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          RESULT 148
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ADH26677,
```

```
The invention relates to a compound targeted to a nucleic acid molecule encoding human phosphoinositide-3-kinase (PI3K) regulatory subunit 4, p150. The compound is an antisense oligonucleotide that specifically hybridises with a nucleic acid molecule encoding PI3K regulatory subunit 4, p150 and inhibits expression of the polypeptide. The antisense oligonucleotide comprises at least one modified internucleoside linkage i.e. a phosphorothioate linkage, at least one modified sugar moiety, preferably a 2'-0-methoxyethyl sugar moiety, or at least one modified nucleobase comprising a 5-methylcytosine. The antisense compounds are useful for modulating the expression of PI3K regulatory subunit 4, p150 and for preventing or treating hyperproliferative disorders and metabolic disorders. These may also be used in research and diagnostics and in preventing or delaying infection or inflammation. This sequence represents an antisense oligonucleotide of the invention.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Human PI3K regulatory subunit 4, p150 DNA antisense oligonucleotide #19.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Human; phosphoinositide-3-kinase regulatory subunit 4; p150; p13K; p13 kinase; ss; antisense oligonucleotide; phosphorothioate linkage; 2'-Omethoxyethyl sugar molety; 5-methylcytosine; hyperproliferative disorder; cancer; Chediak-Higashi syndrome; neurodegenerative disorder; metabolic disorders; inflammation; cytostatic; immunomodulator; neurodegenerative; antimicrobial;
                                                           New antisense oligonucleotides inhibiting the expression of phosphoinostide-3-kinase, regulatory subunit 4, p150, useful for preventing or treating diseases associated with the subunit, e.g. hyperproliferative disorders.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       New antisense oligonuclectides inhibiting the expression of phosphoinositide-3-kinase, regulatory subunit 4, p150, useful for
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Sequence 20 BP; 6 A; 4 C; 9 G; 1 T; 0 U; 0 Other;
                                                                                                                                                       Example 15; SEQ ID NO 12; 62pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            92 CGGTCTGCACTTCTCTCCCG 111
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      20 CGGTCTGCACTTCTCTCCCG 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             31-MAY-2002; 2002US-00160786.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    31-MAY-2002; 2002US-00160786.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ADH26694 standard; DNA; 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Query Match 0.4
Best Local Similarity 100.
Matches 20; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         (ISIS-) ISIS PHARM INC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Freier SM, Dobie KW;
                    WPI; 2004-051923/05.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      WPI; 2004-051923/05.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          antiinflammatory
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    US2003225013-A1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              11-MAR-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          04-DEC-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ADH26694;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          RESULT 149
셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ð
```

BP

(first entry)

```
The invention relates to a compound targeted to a nucleic acid molecule encoding human phosphoinositide-3-kinase (PI3K) regulatory subunit 4, p150. The compound is an antisense oligonucleotide that specifically hybridises with a nucleic acid molecule encoding PI3K regulatory subunit 4, p150 and inhibits expression of the polypeptide. The antisense oligonucleotide comprises at least one modified internucleoside linkage i.e. a phosphorothioate linkage, at least one modified sugar moiety, preferably a 2'-0-methoxyethyl sugar moiety, or at least one modified incleobase comprising a 5-methylcytosine. The antisense compounds are useful for modulating the expression of P13K regulatory subunit 4, p150 and for preventing or treating hyperproliferative disorders and metabolic disorders. These may also be used in research and diagnostics and in preventing or delaying infection or inflammation. This sequence represents an antisense oligonucleotide of the invention.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Human PI3K regulatory subunit 4, p150 DNA antisense oligonucleotide #37.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Human; phosphoinositide-3-kinase regulatory subunit 4; p150; p13K; p13 kinase; ss; antisense oligonucleotide; phosphorothioate linkage; 2'-O-methoxyethyl sugar moiety; 5-methylcytosine; hyperproliferative disorder; cancer; Chediak-Higashi syndrome; neurodegenerative disorder; metabolic disorders; inflammation; cytostatic; immunomodulator; neurodegenerative; antimicrobial;
preventing or treating diseases associated with the subunit, e.g.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    New antisense oligonucleotides inhibiting the expression of bhosphoinositide-3-kinase, regulatory subunit 4, p150, useful for preventing or treating diseases associated with the subunit, e.g. hyperproliferative disorders.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ö
                                                                                                                                                                                                                                                                                                                                                                                                                               0.4%; Score 20; DB 1; Length 20;
                                                                                                                                                                                                                                                                                                                                                                                                                                                               0; Indels
                                                                                                                                                                                                                                                                                                                                                                                        Sequence 20 BP; 9 A; 1 C; 4 G; 6 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                1.46+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                            100.0%; Pred. No. 1.4
                                                         Example 15; SEQ ID NO 29; 62pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Example 15; SEQ ID NO 47; 62pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1115 TCAATTATTTCTTTGACACA 1134
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      rcaarrarricrrrgacaca 1
                       hyperproliferative disorders.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       31-MAY-2002; 2002US-00160786.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     31-MAY-2002; 2002US-00160786.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ADH26712 standard; DNA; 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            (ISIS-) ISIS PHARM INC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Freier SM, Dobie KW;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 WPI; 2004-051923/05.
                                                                                                                                                                                                                                                                                                                                                                                                                                            Local Similarity
les 20; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     antiinflammatory
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              US2003225013-A1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    11-MAR-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                04-DEC-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ADH26712;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      20
                                                                                                                                                                                                                                                                                                                                                                                                                           Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            RESULT 150
                                                                                                                                                                                                                                                                                                                                                                                                                                                             Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ADH26712
   8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 엄
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      o,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Gaps
```

;

Score 20; DB 1; Length 20; Pred. No. 1.4e+02; 0; Mismatches 0; Indels

0.4%; S 100.0%;

0; Mismatches

```
The invention relates to a compound targeted to a nucleic acid molecule encoding human phosphoinositide-3-kinase (F13K) regulatory subunit 4, p150. The compound is an antisense oligonucleotide that specifically hybridises with a nucleic acid molecule encoding P13K regulatory subunit 4, p150 and inhibits expression of the polypeptide. The antisense oligonucleotide comprises at least one modified internucleoside linkage i.e. a phosphorothioate linkag, at least one modified sugar moiety, preferably a 2'-0-methoxyethyl sugar moiety, or at least one modified nucleothio comprising a 5-methyloytosine. The antisense compounds are useful for modulating the expression of P13K regulatory subunit 4, p150 and for preventing or treating hyperproliferative disorders and cancers), Chediak-Higashi syndrome, neurodegenerative disorders and etabolic disorders. These may also be used in research and diagnostics and in preventing or delaying infection or inflammation. This sequence represents an antisense oligonucleotide of the invention.
          888888888888888888888888888888888
```

Sequence 20 BP; 4 A; 5 C; 6 G; 5 T; 0 U; 0 Other;

```
ö
Score 20; DB 1; Length 20;
Pred. No. 1.4e+02;
                   0; Indels
      100.0%; Prec. ...
                                       2391 TGGCTGGCAAAGCTCCTCAA 2410
                                                 0.48;
                   20; Conservative
         Best Local Similarity
 Query Match
                  Matches
                                       ઠે
```

ö

Gaps

ADH26714 standard; DNA; 20 BP ADH26714; RESULT 151 ADH267

11-MAR-2004 (first entry)

Human PI3K regulatory subunit 4, p150 DNA antisense oligonucleotide #39. Human; phosphoinositide-3-kinase regulatory subunit 4; p150; P13K; P13 kinase; ss; antisense oligonucleotide; phosphorothioate linkage; 2'-O-methoxyethyl sugar molety; 5-methylcytosine; hyperproliferative disorder; cancer; Chediak-Higashi syndrome; neurodegenerative disorder; metabolic disorders; inflammation; cytostatic; immunomodulator; neurodegenerative; antimicrobial; antiinflammatory. 

Homo sapiens

US2003225013-A1.

04-DEC-2003

31-MAY-2002; 2002US-00160786.

31-MAY-2002; 2002US-00160786.

(ISIS-) ISIS PHARM INC.

Freier SM, Dobie KW; WPI; 2004-051923/05. New antisense oligonucleotides inhibiting the expression of phosphoinositide-3-kinase, regulatory subunit 4, p150, useful for preventing or treating diseases associated with the subunit, e.g. hyperproliferative disorders.

Example 15; SEQ ID NO 49; 62pp; English.

The invention relates to a compound targeted to a nucleic acid molecule encoding human phosphoinositide-3-kinase (P13K) regulatory subunit 4, p150. The compound is an antisense oligonuclectide that specifically, hybridises with a nucleic acid molecule encoding P13K regulatory subunit 4, p150 and inhibits expression of the polypeptide. The antisense

```
ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        The invention relates to a compound targeted to a nucleic acid molecule encoding human phosphoinositide-3-kinase (P13K) regulatory subunit 4, p150. The compound is an antisense oligonuclectide that specifically hybridises with a nucleic acid molecule encoding P13K regulatory subunit 4, p150 and inhibits expression of the polypeptide. The antisense oligonuclectide comprises at least one modified internucleoside linkage i.e. a phosphorochicate linkage, at least one modified sugar molecy, preferably a 2'-O-methoxyethyl sugar moiety, or at least one modified nucleobase comprising a 5-methylcytosine. The antisense compounds are useful for modulating the expression of P13K regulatory subunit 4, p150
                  i.e. a phosphorothicate linkage, at least one modified sugar moiety, preferably a 2'-O-methoxyethyl sugar moiety, or at least one modified nucleobase comprising a 5-methylcytosine. The antisense compounds are useful for modulating the expression of PI3K regulatory subunit 4, p150 and for preventing or treating hyperproliferative disorders (i.e. cancer), Chediak-Higashi syndrome, neurodegenerative disorders and metabolic disorders. These may also be used in research and diagnostics and in preventing or delaying infection or inflammation. This sequence represents an antisense oligonucleotide of the invention.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Human PI3K regulatory subunit 4, p150 DNA antisense oligonucleotide #43.
oligonucleotide comprises at least one modified internucleoside linkage
                                                                                                                                                                                                                                                                                                                           Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Human; phosphoinositide-3-kinase regulatory subunit 4; p150; P13K; P13 Kinase; ss; antisense oligomucleotide; phosphorothioate linkage; P13 Kinase; ss; antisense oligomucleotide; phosphorothioate linkage; 2. -0-methoxyethyl sugar moiety; 5-methyloytosine; hyperproliferative disorder; cancer; Chediak-Higashi syndrome; neurodegenerative disorder; metabolic disorders; inflammation; cytostatic; immunomodulator; neurodegenerative; antimicrobial; antihiflammatory.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               New antisense oligonucleotides inhibiting the expression of phosphoinositide-3-kinase, regulatory subunit 4, p150, useful for preventing or treating diseases associated with the subunit, e.g. hyperproliferative disorders.
                                                                                                                                                                                                                                                                                                                           ö
                                                                                                                                                                                                                                                                              0.4%; Score 20; DB 1; Length 20; 100.0%; Pred. No. 1.4e+02;
                                                                                                                                                                                                                                                                                                                       0; Indels
                                                                                                                                                                                                                                   Sequence 20 BP; 7 A; 5 C; 3 G; 5 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                     100.0%; Pred. No. 1.4
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Example 15; SEQ ID NO 53; 62pp; English.
                                                                                                                                                                                                                                                                                                                                                                    2524 GTTTACGAATTTGCCAGTGA 2543
                                                                                                                                                                                                                                                                                                                                                                                          ADH26718 standard; DNA; 20 BP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         31-MAY-2002; 2002US-00160786.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               31-MAY-2002; 2002US-00160786
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              11-MAR-2004 (first entry)
                                                                                                                                                                                                                                                                                                  Best Local Similarity 100.
Matches 20; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            (ISIS-) ISIS PHARM INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Dobie KW;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                WPI; 2004-051923/05.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   US2003225013-A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Freier SM,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ADH26718;
                                                                                                                                                                                                                                                                                  Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                RESULT 152
ADH26718/c
8888888888888888
                                                                                                                                                                                                                                                                                                                                                                                                            윱
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ઠ
```

```
The invention relates to a compound targeted to a nucleic acid molecule encoding human phosphoinositide-3-kinase (PI3K) regulatory subunit 4, p150. The compound is an antisense oligonucleotide that specifically chybridises with a nucleic acid molecule encoding PI3K regulatory subunit 4, p150 and inhibits expression of the polypeptide. The antisense oligonucleotide comparises at least one modified internucleoside linkage coligonucleotide comprises at least one modified sugar moiety, preferably a 2'-0-methoxyethyl sugar moiety, or at least one modified nucleobase comprising a 5-methylcytosine. The antisense compounds are nucleobase comprising the expression of PI3K regulatory subunit 4, p150 and for preventing or treating hyperproliferative disorders (i.e. cancer), chediak-Higashi syndrome, neurodegenerative disorders (i.e. cancer), chediak-Higashi syndrome, neurodegenerative disorders (i.e. cancer), chediak-Higashi syndrome, neurodegenerative disorders and and in preventing or delaying infection or inflammation. This sequence and in preventing or delaying infection or inflammation. This sequence
                                                                                                                                                                                                                  ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Human PI3K regulatory subunit 4, p150 DNA antisense oligonucleotide #47.
and for preventing or treating hyperproliferative disorders (i.e. cancer), Chediak-Higashi syndrome, neurodegenerative disorders and metabolic disorders. These may also be used in research and diagnostics and in preventing or delaying infection or inflammation. This sequence represents an antisense oligonucleotide of the invention.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Human; phosphoinositide-3-kinase regulatory subunit 4; p150; P13K; p13 kinase; ss; antisense oligonucleotide; phosphorothioate linkage; 2'-O-methoxyethyl sugar moiety; 5-methylcytosine; hyperproliferative disorder; cancer; Chediak-Higashi syndrome; neurodegenerative disorder; metabolic disorders; inflammation; cytostatic; immunomodulator; neurodegenerative; inmicrobial; antiinflammatory.
                                                                                                                                                                                                                    Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   New antisense oligonucleotides inhibiting the expression of phosphoinositide-3-kinase, regulatory subunit 4, p150, useful for preventing or treating diseases associated with the subunit, e.g. hyperproliferative disorders.
                                                                                                                                                                                                                    ö
                                                                                                                                                                       0.4%; Score 20; DB 1; Length 20;
100.0%; Pred. No. 1.40+02;
tive 0; Mismatches 0; Indels
                                                                                                                               Sequence 20 BP; 3 A; 5 C; 9 G; 3 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Example 15; SEQ ID NO 57; 62pp; English.
                                                                                                                                                                                                                                                              2843 GCCCTCCGCCAGAGGATCCT 2862
                                                                                                                                                                                                                                                                                           20 GCCCTCCGCCAGAGGATCCT
                                                                                                                                                                                                                                                                                                                                                                                                                  ADH26722 standard; DNA; 20 BP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     31-MAY-2002; 2002US-00160786
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           31-MAY-2002; 2002US-00160786
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     (first entry)
                                                                                                                                                                                                                        20; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        (ISIS-) ISIS PHARM INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Dobie KW;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         WPI; 2004-051923/05.
                                                                                                                                                                                  Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       US2003225013-A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     11-MAR-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Freier SM,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               04-DEC-2003
                                                                                                                                                                                                                               Matches
                                                                                                                                                                                                                                                                                                                                                                                                                      셤
               88888888
```

```
The invention relates to a compound targeted to a nucleic acid molecule concoding human phosphoinositide-3-kinase (PI3K) regulatory subunit 4, concoding human phosphoinositide-3-kinase (PI3K) regulatory subunit 4, p150. The compound is an antisense oligonucleotide that specifically confideses with a nucleic acid molecule encoding PI3K regulatory subunit 4, p150 and inhibits expression of the polypeptide. The antisense comprises at least one modified internucleoside linkage confidence linkage, at least one modified sugar moiety, craferably a 2'-0-methoxyethyl sugar moiety, or at least one modified cuseful for modulating the expression of PI3K regulatory subunit 4, p150 and for preventing or treating hyperproliferative disorders and cancer), Chediak-Higashi syndrome, neurodegenerative disorders and cancer), chediak-Higashi syndrome, neurodegenerative disorders and cancer), chediak-Higashi syndrome, neurodegenerative disorders and and in preventing or delaying infection or inflammation. This sequence represents a PI3K regulatory subunit 4, p150 DNA antisense
                                                                           ö
                                                                                                                                                                                                                                                                                                                                                                                                Human; phosphoinositide-3-kinase regulatory subunit 4; p150; P13K; p13 kinase; ds; antisense oligonucleotide; phosphorothioate linkage; 2'-O-methoxyethyl sugar molety; 5-methoxyethyl syndrome; hyperproliferative disorder; cancer; Chediak-Higashi syndrome; neurodegenerative disorder; metabolic disorders; inflammation; cytostatic; immunomodulator; neurodegenerative; antimicrobial;
                                                                             Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         New antisense oligonucleotides inhibiting the expression of phosphoinositide-3-kinase, regulatory subunit 4, p150, useful for preventing or treating diseases associated with the subunit, e.g.
                                                                             ;
                                                                                                                                                                                                                                                                                                                                                                Human PI3K regulatory subunit 4, p150 DNA target region #14.
                                         DB 1; Length 20;
1.4e+02;
                                                                             0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Sequence 20 BP; 4 A; 3 C; 8 G; 5 T; 0 U; 0 Other;
   Sequence 20 BP; 7 A; 3 C; 3 G; 7 T; 0 U; 0 Other;
                                       0.4%; Score 20; DB
100.0%; Pred. No. 1.4
tive 0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Example 15; SEQ ID NO 102; 62pp; English.
                                                                                                                       3057 AGTIGAICTIGITAAAACCA 3076
                                                                                                                                                         20 AGTTGATCTTGTTAAAACCA 1
                                                                                                                                                                                                                                                       ADH26767 standard; DNA; 20 BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          hyperproliferative disorders.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 31-MAY-2002; 2002US-00160786.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         31-MAY-2002; 2002US-00160786
                                                                                                                                                                                                                                                                                                                                  11-MAR-2004 (first entry)
                                                               Local Similarity 100.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     (ISIS-) ISIS PHARM INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             WPI; 2004-051923/05.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            antiinflammatory.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    US2003225013-A1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         04-DEC-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Freier SM,
                                                                                                                                                                                                                                                                                                 ADH26767;
                                                   Query Match
                                                                       Best Loca
Matches
                                                                                                                                                                                                                         RESULT 154
                                                                                                                                                                                                                                                                                 X S
                                                                                                                               ð
```

0.4%; Score 20; DB 1; Length 20;

Query Match

```
The invention relates to a compound targeted to a nucleic acid molecule encoding human phosphoinositide-3-kinase (PI3K) regulatory subunit 4, p150 p150. The compound is an antisense olisjonuclectide that specifically hybridises with a nucleic acid molecule encoding PI3K regulatory subunit 4, p150 and inhibits expression of the polypeptide. The antisense oligonuclectide comprises at least one modified internucleoside linkage i.e. a phosphorothioate linkage, at least one modified sugar moiety, preferably a 2'-O-methoxyethyl sugar moiety, or at least one modified nucleobase comprising a 5-methylcytosine. The antisense compounds are useful for modilating the expression of P13K regulatory subunit 4, p150 and for preventing or treating hyperproliferative disorders and metabolic disorders. These may also be used in research and diagnostics and in preventing or delaying infection or inflammation. This sequence represents a P13K regulatory subunit 4, p150 DNA antisense
                                                      ö
                                                          Gapa
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Human; phosphoinositide-3-kinase regulatory subunit 4; p150; P13K; P13 kinase; ds; antisense oligonucleotide; phosphorothioate linkage; 2'-0-methoxyethyl sugar moiety; 5-methylcytosine; hyperproliferative disorder; cancer; Chediak-Higashi syndrome; neurodegenerative disorder; metabolic disorders; inflammation; cytostatic; immunomodulator; neurodegenerative; antimicrobial;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              New antisense oligonucleotides inhibiting the expression of phosphoinositide-3-kinase, regulatory subunit 4, p150, useful for preventing or treating diseases associated with the subunit, e.g. hyperproliferative disorders.
                                                          .
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Human PI3K regulatory subunit 4, p150 DNA target region #24.
                                                   0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Sequence 20 BP; 5 A; 5 C; 5 G; 5 T; 0 U; 0 Other;
                  Pred. No. 1.4e+02;
Example 15; SEQ ID NO 112; 62pp; English.
                                                                                                                        1032 GGTCACCAGTTGGAATTGGG 1051
                                                                                                                                                                                          20
                                                                                                                                                                        GGTCACCAGTTGGAATTGGG
                                                                                                                                                                                                                                                                                                                                                                   ADH26777 standard; DNA; 20 BP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        31-MAY-2002; 2002US-00160786.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              31-MAY-2002; 2002US-00160786
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 (first entry)
              Best Local Similarity 100.
Matches 20; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            (ISIS-) ISIS PHARM INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Freier SM, Dobie KW;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       WPI; 2004-051923/05.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         antiinflammatory.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 US2003225013-A1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 11-MAR-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   04-DEC-2003.
                                                                                                                                                                                                                                                                                                                                                                                                                                            ADH26777;
                                                                                                                                                                                                                                                                                                 RESULT 155
                                                                                                                                                                                                                                                                                                                              ADH26777

XX

ADH26777

XX

ADH36777

XX

ADH36777

XX

ADH36777

XX

ADH36777

ADH36777

ADH377

ADH3
                                                                                                                                                                                   셤
                                                                                                                            ઠે
```

```
ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             The invention relates to a compound targeted to a nucleic acid molecule encoding human phosphoinositide-3-kinase (PI3K) regulatory subunit 4, p150. The compound is an antisense oligonuclectide that specifically hybridses with a nucleic acid molecule encoding PI3K regulatory subunit 4, p150 and inhibits expression of the polypeptide. The antisense oligonuclectide comprises at least one modified internucleoside linkage i.e. a phosphorothioset linkage, at least one modified sugar moiety, preferably a 2-0-methoxyethyl sugar moiety, or at least one modified nucleobase comprising a 5-methylcytosine. The antisense compounds are useful for modulating the expression of PI3K regulatory subunit 4, p150 and for preventing or treating hyperproliferative disorders (1.e.
                                                                                                                                                                                                                              Human PI3K regulatory subunit 4, p150 DNA antisense oligonucleotide #27.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              cancer), Chedlak-Higashi syndrome, neurodegenerative disorders and metabolic disorders. These may also be used in research and diagnostics and in preventing or delaying infection or inflammation. This sequence represents an antisense oligonucleotide of the invention.
                                                                                                                                                                                                                                                                Human; phosphoinositide-3-kinase regulatory subunit 4; p150; P13K; P13 kinase; ss; antisense oligonucleotide; phosphorothioate linkage; 2'-O-methoxyethyl sugar moiety; 5-methyloxyesine; hyperproliferative disorder; cancer; Chediak-Higashi syndrome; neurodegenerative disorder; metabolic disorders; inflammation; cytostatic; immunomodulator; neurodegenerative; antimicrobial;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Gapa
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              New antisense oligonucleotides inhibiting the expression of hoosphoinositide-3-kinase, regulatory subunit 4, pl50, useful for preventing or treating diseases associated with the subunit, e.g. hyperproliferative disorders.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 0.4%; Score 20; DB 1; Length 20; 100.0%; Pred. No. 1.4e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Sequence 20 BP; 9 A; 1 C; 4 G; 6 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       , Pred. No. 1.4
0, Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Example 15; SEQ ID NO 37; 62pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1513 TITCCTGAAATATTTTACAC 1532
1 ACAGCTCTGAGATTCCTGGA 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TTTCCTGAAATATTTTACAC 1
                                                                                                                 BP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        31-MAY-2002; 2002US-00160786.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             31-MAY-2002; 2002US-00160786.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     100.08;
                                                                                                                 ADH26702 standard; DNA; 20
                                                                                                                                                                                          11-MAR-2004 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Local Similarity 100.
Les 20; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 (ISIS-) ISIS PHARM INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Freier SM, Dobie KW;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             WPI; 2004-051923/05.
                                                                                                                                                                                                                                                                                                                                                                                   antiinflammatory
                                                                                                                                                                                                                                                                                                                                                                                                                                                              US2003225013-A1.
                                                                                                                                                                                                                                                                                                                                                                                                                           Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    04-DEC-2003
                                                                                                                                                      ADH26702;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Best Loca
Matches
                                                                           RESULT 156
ADH26702/c
                                                                                                                 음
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ò
```

Gapa

ö

0.4%; Score 20; DB 1; Length 20; 100.0%; Pred. No. 1.4e+02; live 0; Mismatches 0; Indels

20, Conservative

Similarity

Query Match Best Local \$

Matches

```
The invention relates to a compound targeted to a nucleic acid molecule encoding human phosphoinositide-3-kinase (PI3K) regulatory subunit 4, encoding human phosphoinositide-3-kinase (PI3K) regulatory subunit 4, p150. The compound is an antisense oligonucleotide that specifically hybridises with a nucleic acid molecule encoding PI3K regulatory subunit 4, p150 and inhibits expression of the polypeptide. The antisense 4, p150 and inhibits expression of the polypeptide. The antisense coligonucleotide comprises at least one modified internal posicide linkage oligonucleotide comprising a 1-east one modified sugar moiety, i.e. a phosphorothioate linkage, at least one modified sugar moiety, or at least one modified preferably a 2'-O-methoxyehtyl sugar moiety, or at least one modified preferably a 2'-O-methoxyehtyl sugar moiety, or at least one modified nucleobase comprising the expression of PI3K regulatory subunit 4, p150 and for preventing or treating Pyperproliferative disorders (i.e. and for preventing or treating Pyperproliferative disorders and cand in preventing or delaying infection or inflammation. This sequence and in preventing or allogonucleotide of the invention.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Human PI3K regulatory subunit 4, p150 DNA antisense oligonucleotide #56.
                            Human PI3K regulatory subunit 4, p150 DNA antisense oligonucleotide #50.
                                                                            Human; phosphoinositide-3-kinase regulatory subunit 4; pl50; Pl3K; Pl3 Kinase; ss; antisense oligonucleotide; phosphorothioate linkage; 2'-O-methoxyethyl sugar moiety; 5-metholycycaine; hyperproliferative disorder; cancer; Chediak-Higashi syndrome; neurodegenerative disorder; metabolic disorders; inflammation; cytostatic; immunomodulator; neurodegenerative; antimicrobial;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              New antisense oligonucleotides inhibiting the expression of phosphoinositide-3-kinase, regulatory subunit 4, p150, useful for preventing or treating diseases associated with the subunit, e.g.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        0.4%; Score 20; DB 1; Length 20;
100.0%; Pred. No. 1.4e+02;
iive 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Sequence 20 BP; 6 A; 2 C; 6 G; 6 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Example 15; SEQ ID NO 60; 62pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 3341 GTAGTACAATCTTACCATCC 3360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    20 GTAGTACAATCTTACCATCC 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               HP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     hyperproliferative disorders.
                                                                                                                                                                                                                                                                                                                                                                                                                                            31-MAY-2002; 2002US-00160786.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           31-MAY-2002; 2002US-00160786
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ADH26731 standard; DNA; 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Local Similarity 100.
(first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                (ISIS-) ISIS PHARM INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Dobie KW;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            WPI; 2004-051923/05.
                                                                                                                                                                                                                                                    antiinflammatory.
                                                                                                                                                                                                                                                                                                                                                   US2003225013-A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                11-MAR-2004
                                                                                                                                                                                                                                                                                                   sapiens.
11-MAR-2004
                                                                                                                                                                                                                                                                                                                                                                                               04-DEC-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Freier SM,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ADH26731;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Best Loca
Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     RESULT 159
                                                                                                                                                                                                                                                                                                      Homo
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ADH26731
  g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  The invention relates to a compound targeted to a nucleic acid molecule encoding human phosphoinositide-3-kinase (PI3K) regulatory subunit 4, encoding human phosphoinositide-3-kinase (PI3K) regulatory subunit 4, p150. The compound is an antisense oligonucleotide that specifically chycidises with a nucleic acid molecule encoding PI3K regulatory subunit 4, p150 and inhibits expression of the polypeptide. The antisense oligonucleotide comprises at least one modified internucleoside linkage i.e. a phosphorothioate linkage, at least one modified sugar moiety, or at least one modified nucleobase comprising a 5-methylcytosine. The antisense compounds are nucleobase comprising the expression of P13K regulatory subunit 4, p150 useful for modulating the expression of P13K regulatory subunit 4, p150 and for preventing or treating hyperproliferative disorders and cancer), Chediak-Higashi syndrome, neurodegenerative disorders and metabolic disorders. These may also be used in research and diagnostics and in preventing or delaying infection or inflammation. This sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ö
                                                                                                                                                                             Human PI3K regulatory subunit 4, p150 DNA antisense oligonucleotide #44.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Gaps
                                                                                                                                                                                                                            Human; phosphoinositide-3-Kinase regulatory subunit 4; p150; p13K; p13 kinase; ss; antisense oligonucleotide; phosphorothioate linkage; 2'-0-methoxyethyl sugar moiety; 5-methoXyetosine; hyperproliferative disorder; cancer; Chediak-Higashi syndrome; neurodegenerative disorder; metabolic disorders; inflammation; cytostatic; immunomodulator; neurodegenerative; antimicrobial;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            New antisense oligonucleotides inhibiting the expression of phosphoinositide-3-kinase, regulatory subunit 4, p150, useful for preventing or treating diseases associated with the subunit, e.g. hyperproliferative disorders.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             .;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Score 20; DB 1; Length 20;
Pred. No. 1.4e+02;
0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             represents an antisense oligonucleotide of the invention.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Sequence 20 BP; 5 A; 3 C; 8 G; 4 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Example 15; SEQ ID NO 54; 62pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  2860 CCTGCCATAGCACAGCTTCT 2879
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            0.4%; Scc.
100.0%; Pre
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               20 CCTGCCATAGCACAGCTTCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ADH26725 standard; DNA; 20 BP
                                          ВР
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          31-MAY-2002; 2002US-00160786.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         31-MAY-2002; 2002US-00160786.
                     ADH26719/c
ID ADH26719 standard; DNA; 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Conservative
                                                                                                                                           (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              (ISIS-) ISIS PHARM INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Freier SM, Dobie KW;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          WPI; 2004-051923/05.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Similarity
                                                                                                                                                                                                                                                                                                                                                                                               antiinflammatory.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              US2003225013-A1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                 Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Best Local Sim
Matches 20;
                                                                                                                                             11-MAR-2004
```

04-DEC-2003

for

ö

Gaps

;

Human; phosphoinositide-3-kinase regulatory subunit 4; p150; PI3K;

ADH26725;

SKKH

RESULT 158 ADH26725

Query Match

8 d antiinflammatory.

Homo sapiens.

```
The invention relates to a compound targeted to a nucleic acid molecule encoding human phosphoinostide-3-kinase (P13K) regulatory subunit 4, p150. The compound is an antisense oligonucleotide that specifically hybridises with a nucleic acid molecule encoding P13K regulatory subunit 6, p150 and inhibits expression of the polypeptide. The antisense conjection at least one modified internucleoside linkage i.e. a phosphorothioate linkage at least one modified sugar moiety, preferably a 2'-O-methoxyethyl sugar moiety, or at least one modified sugar moiety, concleabase comprising a 5-methylcycosine. The antisense compounds are useful for modulating the expression of P13K regulatory subunit 4, p150 and for preventing or treating hyperproliferative disorders (i.e. cancer), Chedriak-Higashi syndrome, neurodegensative disorders and metabolic disorders. These may also be used in research and diagnostice and in preventing or delaying infection or inflammation. This sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Human PI3K regulatory subunit 4, p150 DNA antisense oligonucleotide #65.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Human; phosphoinositide-3-kinase regulatory subunit 4; p150; P13K; P13 kinase; ss; antisense oligonucleotide; phosphorothioate linkage; 2'-O-methoxyethyl sugar molety; 5-methylcytosine; hyperproliferative disorder; cancer; Chediak-Higashi syndrome; neurodegenerative disorder; metabolic disorders; inflammation; cytostatic; immunomodulator; neurodegenerative; antimicrobial;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Gaps
PI3 kinase; ss; antisense oligonucleotide; phosphorothioate linkage;
                                                                                                                                                                                                                                                                                                                                                                                                                                                         New antisense oligonucleotides inhibiting the expression of phosphoinositide-3-kinase, regulatory subunit 4, p150, useful for preventing or treating diseases associated with the subunit, e.g.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ö
                  2'-O-methoxyethyl sugar moiety; 5-methylcytosine;
hyperproliferative disorder; cancer; Chediak-Higashi syndrome;
neurodegenerative disorder; metabolic disorders; inflammation;
cytostatic; immunomodulator; neurodegenerative; antimicrobial;
antinflammatory.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Score 20; DB 1; Length 20;
Pred. No. 1.4e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      represents an antisense oligonucleotide of the invention.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Sequence 20 BP; 6 A; 5 C; 3 G; 6 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                100.0%; Prec. ...
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Example 15; SEQ ID NO 66; 62pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                3555 GAATCGAATTAGAGTCTCTG 3574
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       GAATCGAATTAGAGTCTCTG 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ADH26740 standard; DNA; 20 BP
                                                                                                                                                                                                                                                                                                  31-MAY-2002; 2002US-00160786.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      hyperproliferative disorders.
                                                                                                                                                                                                                                                           31-MAY-2002; 2002US-00160786
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Local Similarity 100.
nes 20; Conservative
                                                                                                                                                                                                                                                                                                                                       (ISIS-) ISIS PHARM INC
                                                                                                                                                                                                                                                                                                                                                                               Freier SM, Dobie KW;
                                                                                                                                                                                                                                                                                                                                                                                                                      WPI; 2004-051923/05.
                                                                                                                                                                            US2003225013-A1
                                                                                                                                        Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      11-MAR-2004
                                                                                                                                                                                                                   04-DEC-2003.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ADH26740;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ADH26740,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           &&&&&&&&
셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ò
```

```
The invention relates to a compound targeted to a nucleic acid molecule encoding human phosphoinositide-3-kinase (PI3K) regulatory subunit 4, p150 p150. The compound is an antisense oligonucleotide that specifically hybridises with a nucleic acid molecule encoding PI3K regulatory subunit 4, p150 and inhibits expression of the polypeptide. The antisense oligonucleotide comprises at least one modified internucleoside linkage i.e. a phosphorothioate linkage, at least one modified augar moiety, preferably a 2'-O-methoxyethyl sugar moiety, or at least one modified in useful for modulating the expression of PI3K regulatory subunit 4, p150 and for preventing or treating hyperproliferative disorders and cancer), Chediak-Higashi syndrome, neurodegenerative disorders and metabolic disorders. These may also be used in research and diagnostics and in preventing or delaying infection or inflammation. This sequence represents an antisense oligonucleotide of the invention.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Human PI3K regulatory subunit 4, p150 DNA antisense oligonucleotide #71.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Gape
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Human; phosphoinositide-3-kinase regulatory subunit 4; p150; P13K; P13 kinase; ss; antisense oligonucleotide; phosphorothioate linkage; 2'-O-methoxyethyl sugar molety; 5-methylcytosine; hyperproliferative disorder; cancer; Chediak-Higashi syndrome; neurodegenerative disorder; metabolic disorder; inflammation; cytostatic; immunomodulator; neurodegenerative; antimicrobial;
                                                                                                                                                                                                                                                                                                                          New antisense oligonucleotides inhibiting the expression of phosphoinositide-3-kinase, regulatory subunit 4, p150, useful for preventing or treating diseases associated with the subunit, e.g.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             0.4%; Score 20; DB 1; Length 20; 100.0%; Pred. No. 1.4e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Sequence 20 BP; 6 A; 7 C; 4 G; 3 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                        Example 15; SEQ ID NO 75; 62pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   4166 TGATTGCAGCTGTTCAGGGC 4185
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      20 TGATTGCAGCTGTTCAGGGC 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ADH26746 standard; DNA; 20 BP
                                                                                                                                             31-MAY-2002; 2002US-00160786.
                                                                                                                                                                                                                                                                                                                                                                                hyperproliferative disorders.
                                                                                                                                                                               31-MAY-2002; 2002US-00160786.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                100.08;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          11-MAR-2004 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Local Similarity 100.
                                                                                                                                                                                                                     (ISIS-) ISIS PHARM INC.
                                                                                                                                                                                                                                                        Freier SM, Dobie KW;
                                                                                                                                                                                                                                                                                        WPI; 2004-051923/05.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               antiinflammatory
                                                                      US2003225013-A1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    US2003225013-A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Homo sapiens
                                                                                                        04-DEC-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ADH26746;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Best Loca
Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               RESULT 161
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ADH26746,
ઠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      용
```

ô

```
Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            RESULT 163
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ADH26772
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             q
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ð
                                                                                                                                                                                                                                                                                                                                        The invention relates to a compound targeted to a nucleic acid molecule encoding human phosphoinositide-3-kinase (PI3K) regulatory subunit 4, p150 The compound is an antisense olisgonuclocide that specifically hybridises with a nucleic acid molecule encoding PI3K regulatory subunit 4, p150 and inhibits expression of the polypeptide. The antisense oligonuclocided comprises at least one modified internucleoside linkage i.e. a phosphorothioate linkage, at least one modified sugar moiety, preferably a 2'-O-methoxyethyl sugar moiety, or at least one modified nucleobase comprising a 5-methyloytosine. The antisense compounds are nucleobase comprising the expression of PI3K regulatory subunit 4, p150 and for preventing or treating hyperproliferative disorders (i.e. cancer), Chediak-Higashi syndrome, neurodegenerative disorders and and in preventing or delaying infection or inflammation. This sequence and in preventing or delaying infection or inflammation. This sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ô
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Human; phosphoinositide-3-kinase regulatory subunit 4; p150; p13K; p13 kinase; ds; antisense oligonucleotide; phosphorothioate linkage; 2'-0-methoxyethyl sugar moiety; 5-methoxyetosine; hyperproliferative disorder; cancer; Chediak-Higashi syndrome; neurodegenerative disorder; metabolic disorders; inflammation; cytostatic; immunomodulator; neurodegenerative; antimicrobial;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Gaps
                                                                                                                                                                                                                       New antisense oligonucleotides inhibiting the expression of phosphoinositide-3-kinase, regulatory subunit 4, p150, useful for preventing or treating diseases associated with the subunit, e.g.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Human PI3K regulatory subunit 4, p150 DNA target region #2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              DB 1; Length 20;
1.4e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Sequence 20 BP; 7 A; 6 C; 2 G; 5 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       100.0%; Pred. .v..
                                                                                                                                                                                                                                                                                                                Example 15; SEQ ID NO 81; 62pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                0.4%; Score 20;
100.0%; Pred. No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   4397 ATGITGITGCAGGAAGTACT 4416
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     20 ATGTTGTTGCAGGAAGTACT 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ADH26755 standard; DNA; 20 BP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   31-MAY-2002; 2002US-00160786.
                                                        31-MAY-2002; 2002US-00160786.
                                                                                        31-MAY-2002; 2002US-00160786.
                                                                                                                                                                                                                                                                                 hyperproliferative disorders.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Local Similarity 100.
hes 20; Conservative
                                                                                                                           PHARM INC
                                                                                                                                                             Freier SM, Dobie KW;
                                                                                                                                                                                              WPI; 2004-051923/05.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  cytostatic; immu
antiinflammatory
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      JS2003225013-A1.
                                                                                                                           SISI (-SISI)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      04-DEC-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            11-MAR-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ADH26755;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          RESULT 162
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Ношо
```

g

ò

```
The invention relates to a compound targeted to a nucleic acid molecule encoding human phosphoinositide-3-kinase (PI3K) regulatory subunit 4, p150. The compound is an antisense oligonucleotide that specifically confides with a nucleic acid molecule encoding PI3K regulatory subunit 4, p150 and inhibits expression of the polypeptide. The antisense 4, p150 and inhibits expression of the polypeptide. The antisense coligonucleotide comprises at least one modified internucleoside linkage i.e. a phosphorothioate linkage, at least one modified sugar moiety, preferably a 2'-O-methoxyethyl sugar moiety, or at least one modified nucleobase comprising the expression of P13K regulatory subunit 4, p150 and for preventing or treating hyperproliferative disorders and cancer), Chediak-Higashi syndrome, neurodegenerative disorders and metabolic disorders. These may also be used in research and diagnostics metabolic disorders. These may also be used in research and diagnostics cand in preventing or delaying infection or inflammation. This sequence represents a P13K regulatory subunit 4, p150 DNA antisense
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Human; phosphoinositide-3-kinase regulatory subunit 4; p150; P13K; p13 kinase; ds; antieense oligonuclectide; phosphorothioate linkage; 2'-0-methoxyethyl sugar moiety; 5-methylcytosine; hyperproliferative disorder; cancer; Chediak-Higashi syndrome; neurodegenerative disorder; metabolic disorders; inflammation; cytostetic; immunomodulator; neurodegenerative; inmicrobial; antihlammatory.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Gaps
                                                                                                                                                                                                                                                                   New antisense oligonucleotides inhibiting the expression of phosphoinositide-3-kinase, regulatory subunit 4, p150, useful for preventing or treating diseases associated with the subunit, e.g. hyperproliferative disorders.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       .;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Human PI3K regulatory subunit 4, p150 DNA target region #19.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Length 20;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Sequence 20 BP; 1 A; 9 C; 4 G; 6 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    0.4%; Score 20; DB 1; Le
100.0%; Pred. No. 1.4e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  100.0%; Prec. ...
                                                                                                                                                                                                                                                                                                                                                                                                                                                     Example 15; SEQ ID NO 90; 62pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     92 CGGTCTGCACTTCTCTCCCG 111
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1 cggrcrgcActrcrcrccG 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               31-MAY-2002; 2002US-00160786.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  31-MAY-2002; 2002US-00160786.
31-MAY-2002; 2002US-00160786.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ADH26772 standard; DNA; 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        11-MAR-2004 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Local Similarity 100 hes 20; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     (ISIS-) ISIS PHARM INC
                                                                          (ISIS-) ISIS PHARM INC
                                                                                                                                                Dobie KW;
                                                                                                                                                                                                                   WPI; 2004-051923/05.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             US2003225013-A1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            04-DEC-2003.
                                                                                                                                                    Freier SM,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ADH26772;
```

```
ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   셤
                                                                                                                                                          The invention relates to a compound targeted to a nucleic acid molecule encoding human phosphoinositide-3-kinase (PI3K) regulatory subunit 4, p150 momound its an antisense oligonucleotide that specifically hybridises with a nucleic acid molecule encoding PI3K regulatory subunit 4, p150 and inhibits expression of the polypeptide. The antisense oligonucleotide comprises at least one modified internucleoside linkage i.e. a phosphorothioate linkage, at least one modified sugar moiety, preferably a 2'-O-methoxyethyl sugar moiety, or at least one modified nucleobase comprising a 5-methylcytosine. The antisense compounds are useful for modulating the expression of F13K regulatory subunit 4, p150 and for preventing or treating hyperproliferative disorders and metabolic disorders. These may also be used in research and diagnostics and in preventing or delaying infection or inflammation. This sequence represents a P13K regulatory subunit 4, p150 DNA antisense
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Human; phosphoinositide-3-kinase regulatory subunit 4; p150; P13K; P13 kinase; ds; antisense oligonucleotide; phosphorothioate linkage; 2'-O-methoxyethyl sugar moietry; 5-methylcytosine; hyperproliferative disorder; cancer; Chediak-Higashi syndrome; neurodegenerative disorder; metabolic disorders; inflammation;
                                                     New antieense oligonucleotides inhibiting the expression of phosphoinositide-3-kinase, regulatory subunit 4, p150, useful for preventing or treating diseases associated with the subunit, e.g.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       cytostatic; immunomodulator; neurodegenerative; antimicrobial;
antiinflammatory.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Human PI3K regulatory subunit 4, p150 DNA target region #23.
                                                                                                                                                                                                                                                                                                                                                                                                                                                       0.4%; Score 20; DB 1; Length 20; 100.0%; Pred. No. 1.4e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                         Sequence 20 BP; 3 A; 7 C; 5 G; 5 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                       Query Match
Best Local Similarity 100.0%; Pred. No. 1.3
Conservative 0; Mismatches
                                                                                                                                  Example 15; SEQ ID NO 107; 62pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1498 CAGCGTGGCAATGCCTTTCC 1517
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             caecereceaniecerrice 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ADH26776 standard; DNA; 20 BP
                                                                                                    hyperproliferative disorders.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           31-MAY-2002; 2002US-00160786.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             31-MAY-2002; 2002US-00160786
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       (ISIS-) ISIS PHARM INC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Freier SM, Dobie KW;
Dobie KW;
                            WPI; 2004-051923/05.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     WPI; 2004-051923/05.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   US2003225013-A1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     11-MAR-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               04-DEC-2003.
Freier SM,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ADH26776;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             RESULT 164
셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ò
```

```
The invention relates to a compound targeted to a nucleic acid molecule encoding human phosphoinositide-3-kinase (PI3K) regulatory subunit 4, p150 The compound is an antisense oligonuclectide that specifically hybridises with a nucleic acid molecule encoding PI3K regulatory subunit 4, p150 and inhibits expression of the polypeptide. The antisense oligonuclectide comprises at least one modified internucleoside linkage i.e. a phosphorothioate linkage, at least one modified sugar molety, preferably a 2'-O-methoxyethyl sugar molety, or at least one modified sugar molety, preferably a 2'-O-methoxyethyl sugar molety, or at least one modified sugar molety, or at least one modified nucleobase comprising a 5-methylcytosine. The antisense compounds are useful for modulating the expression of PI3K regulatory subunit 4, p150 and for preventing or treating hyperpoliferative disorders and cancer), Chediak-Higashi syndrome, neurodegenerative disorders and metabolic disorders. These may also be used in research and diagnostics and in preventing or delaying infection or inflammation. This sequence represents a PI3K regulatory subunit 4, p150 DNA antisense
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Human PI3K regulatory subunit 4, p150 DNA antisense oligonucleotide #5.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Human; phosphoinositide-3-kinase regulatory subunit 4; p150; P13K; P13 kinase; ss; antisense oligonucleotide; phosphorothioate linkage; 2'-O-methoxyethyl sugar molety; 5-methylcytosine; hyperproliferative disorder; cancer; Chediak-Higashi syndrome; neurodegenerative disorder; metabolic disorders; inflammation; cytostatic; immunomodulator; neurodegenerative; antimicrobial;
New antisense oligonucleotides inhibiting the expression of phosphoinositide-3-kinase, regulatory subunit 4, p150, useful for preventing or treating diseases associated with the subunit, e.g.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        New antisense oligonucleotides inhibiting the expression of phosphoinositide-3-kinase, regulatory subunit 4, p150, useful for preventing or treating diseases associated with the subunit, e.g. hyperproliferative disorders.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Query Match 0.4%; Score 20; DB 1; Length 20; Best Local Similarity 100.0%; Pred. No. 1.4e+02; Matches 20; Conservative 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Sequence 20 BP; 6 A; 5 C; 4 G; 5 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   oligonucleotide target region of the invention.
                                                                                                                                          Example 15; SEQ ID NO 111; 62pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1978 GCCCAAGATGATGCTACTAT 1997
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1 GCCCAAGATGATGCTACTAT 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ADH26680 standard; DNA; 20 BP.
                                                                                     hyperproliferative disorders.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              31-MAY-2002; 2002US-00160786
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          31-MAY-2002; 2002US-00160786
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              11-MAR-2004 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               (ISIS-) ISIS PHARM INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Dobie KW;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            WPI; 2004-051923/05.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       antiinflammatory.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 JS2003225013-A1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         04-DEC-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Freier SM,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ADH26680;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         RESULT 165
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ADH26680/
```

```
The invention relates to a compound targeted to a nucleic acid molecule encoding human phosphoinositide-3-kinase (PI3K) regulatory subunit 4, pl50 pl50. The compound is an antisense oligonucleotide that specifically thyridises with a nucleic acid molecule encoding PI3K regulatory subunit 4, pl50 and inhibits expression of the polypeptide. The antisense oligonucleotide comprises at least one modified internucleoside linkage i.e. a phosphorothioate linkage, at least one modified sugar moiety, preferably a 2'-O-methoxyethyl sugar moiety, or at least one modified nucleobase comprising a 5-methylcytosine. The antisense compounds are useful for modulating the expression of PI3K regulatory subunit 4, pl50 and for preventing or treating hyperproliferative disorders (i.e. cance), Chediak-Higashi syndrome, neurodegenerative disorders and in preventing or delaying infection or inflammation. This sequence represents an antisense oligonucleotide of the invention.
                                                                                                                                                                                                                                                                                                                                                                                                                                    ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Human PI3K regulatory subunit 4, p150 DNA antisense oligonucleotide #10.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        The invention relates to a compound targeted to a nucleic acid molecule encoding human phosphoinositide-3-kinase (PI3K) regulatory subunit 4,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Human; phosphoinositide-3-kinase regulatory subunit 4; p150; P13K; p13 kinase; ss; antisense oligonucleotide; phosphorothioate linkage; 2'-0-methoxyethyl sugar moiety; 5-methylcytosine; hyperproliferative disorder; cancer; Chediak-Higashi syndrome; neurodegenerative disorder; metabolic disorders; inflammation; cytostatic; immunomodulator; neurodegenerative; antimicrobial;
                                                                                                                                                                                                                                                                                                                                                                                                                                    Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        New antisense oligonucleotides inhibiting the expression of phosphoinositide-3-kinase, regulatory subunit 4, p150, useful for preventing or treating diseases associated with the subunit, e.g.
                                                                                                                                                                                                                                                                                                                                                                                                                                    .;
0
                                                                                                                                                                                                                                                                                                                                                                                              0.4%; Score 20; DB 1; Length 20;
00.0%; Pred. No. 1.4e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                  0; Indels
                                                                                                                                                                                                                                                                                                                                                          Sequence 20 BP; 6 A; 3 C; 6 G; 5 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                  100.0%; Pred. No. 1.4 iive 0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Example 15; SEQ ID NO 20; 62pp; English
              Example 15; SEQ ID NO 15; 62pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            486 CCTCTGAACGATTTTGACAC 505
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               20 ccrcrcaaccarrrraacac 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ВР
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    hyperproliferative disorders.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      31-MAY-2002; 2002US-00160786
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            31-MAY-2002; 2002US-00160786
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ADH26685 standard; DNA; 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                  Best Local Similarity 100. Matches 20; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                (ISIS-) ISIS PHARM INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Dobie KW;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          WPI; 2004-051923/05.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   antiinflammatory
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           US2003225013-A1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         11-MAR-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 04-DEC-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Freier SM,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ADH26685;
                                                                                                                                                                                                                                                                                                                                                                                                  Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           RESULT 166
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ADH26685,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   셤
```

```
ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               The invention relates to a compound targeted to a nucleic acid molecule encoding human phosphoinositide-3-kinase (PI3K) regulatory subunit 4, p150. The compound is an antisense oligonucleotide that specifically hybridises with a nucleic acid molecule encoding PI3K regulatory subunit 4, p150 and inhibits expression of the polypeptide. The antisense oligonucleotide comprises at least one modified internucleoside linkage i.e. a phosphorothioate linkage, at least one modified sugar moiety,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Human P13K regulatory subunit 4, p150 DNA antisense oligonucleotide #23.
                      subunit
                                                                      i.e. a phosphorothiozet linkage, at least one modified sugar moiety, preferably a 2.0-methoxyethyl sugar moiety, or at least one modified nucleobase comprising a 5-methylycytosine. The antisense compounds are useful for modulating the expression of PI3K regulatory subunit 4, p150 and for preventing or treating hyperproliferative disorders (i.e. cancer), Chediak-Higashi syndrome, neurodegenerative disorders and metabolic disorders. These may also be used in research and diagnostics and in preventing or delaying infection or inflammation. This sequence represents an antisense oligonucleotide of the invention.
p150. The compound is an antisense oligonucleotide that specifically hybridises with a nucleic acid molecule encoding P13K regulatory subunit 4, p150 and inhibits expression of the polypeptide. The antisense oligonucleotide comprises at least one modified internucleoside linkage
                                                                                                                                                                                                                                                                                                                                                     Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Human; phosphoinositide-3-kinase regulatory subunit 4; p150; P13K; P13 kinase; ss; antisense oligonuclectide; phosphorothioate linkage; 2'-0-methoxyethyl sugar moiety; 5-methyloytosine; hyperproliferative disorder; cancer; Chediak-Higashi syndrome; neurodegenerative disorder; metabolic disorder; inflammation; cytostatic; immunomodulator; neurodegenerative; inmicrobial; antiinflammatory.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          New antisense oligonucleotides inhibiting the expression of phosphoinositide-3-kinase, regulatory subunit 4, p150, useful for preventing or treating diseases associated with the subunit, e.g. hyperproliferative disorders.
                                                                                                                                                                                                                                                                                                                                                     ö
                                                                                                                                                                                                                                                                                                             DB 1; Length 20;
1.4e+02;
                                                                                                                                                                                                                                                                                                                                                   0; Indels
                                                                                                                                                                                                                                                                           Sequence 20 BP; 8 A; 5 C; 3 G; 4 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                 0.4%; Score 20; DB 100.0%; Pred. No. 1.4 rative 0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Example 15; SEQ ID NO 33; 62pp; English.
                                                                                                                                                                                                                                                                                                                                                                                              GGTTTTTGCAATTCAGGATC 745
                                                                                                                                                                                                                                                                                                                                                                                                                    BP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            31-MAY-2002; 2002US-00160786.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  31-MAY-2002; 2002US-00160786.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ADH26698 standard; DNA; 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            11-MAR-2004 (first entry)
                                                                                                                                                                                                                                                                                                                                                           Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       (ISIS-) ISIS PHARM INC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Dobie KW;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  WPI; 2004-051923/05.
                                                                                                                                                                                                                                                                                                                                 Local Similarity
es 20; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     US2003225013-A1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       04-DEC-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Freier SM,
                                                                                                                                                                                                                                                                                                                                                                                                  726
                                                                                                                                                                                                                                                                                                                                                                                                                                    20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ADH26698;
                                                                                                                                                                                                                                                                                                                     Query Match
                                                                                                                                                                                                                                                                                                                                             Best Loca
Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 RESULT 167
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     4DH26698,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      용
              \mathcal{C}_{\mathcal{C}}
                                                                                                                                                                                                                                                                                                                                                                                                    ò
```

gibbs-10-667-022-4.rng

```
ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             The invention relates to a compound targeted to a nucleic acid molecule encoding human phosphoinositide-3-kinase (PI3K) regulatory subunit 4, p150. The compound is an antisense oligonuclectide that specifically hybridises with a nucleic acid molecule encoding PI3K regulatory subunit 4, p150 and inhibits expression of the polypeptide. The antisense oligonucleotide comprises at least one modified internucleoside linkage i.e. a phosphorothioate linkage, at least one modified internucleoside in preferably a 2-0-methoxyethyl sugar moiety, or at least one modified nucleobase comprising a 5-methylcytosine. The antisense compounds are useful for modulating the expression of P13K regulatory subunit 4, p150 and for preventing or treating hyperproliferative disorders (i.e. cancer), Chediak-Higashi syndrome, neurodegenerative disorders and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Human PI3K regulatory subunit 4, p150 DNA antisense oligonucleotide #53.
preferably a 2'-O-methoxyethyl sugar molety, or at least one modified nucleobase comprising a 5-methylcytosine. The antisense compounds are useful for modilating the expression of PI3K regulatory subunit 4, p150 and for preventing or treating hyperprofiferative disorders (i.e.
                                                                              cancer), Chediak-Higashi syndrome, neurodegenerative disorders and metabolic disorders. These may also be used in research and diagnostics and in preventing or delaying infection or inflammation. This sequence represents an antisense oligonucleotide of the invention.
                                                                                                                                                                                                                                                                    Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Human; phosphoinositide-3-kinase regulatory subunit 4; p150; P13K; P13 kinase; ss; antisense oligonucleotide; phosphorothioate linkage; 2'-O-methoxyethyl sugar molety; 5-methylcytosine; hyperproliferative disorder; cancer; Chediak-Higashi syndrome; neurodegenerative disorder; metabolic disorders; inflammation; cytostatic; immunomodulator; neurodegenerative; antimicrobial;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      New antisense oligonucleotides inhibiting the expression of phosphoinositide. 3-kinase, regulatory subunit 4, pl50, useful for preventing or treating diseases associated with the subunit, e.g. hyperproliferative disorders.
                                                                                                                                                                                                                                                                      ..
0
                                                                                                                                                                                                                           Score 20; DB 1; Length 20;
Pred. No. 1.4e+02;
                                                                                                                                                                                                                                                               0; Indels
                                                                                                                                                                                     Sequence 20 BP; 9 A; 1 C; 5 G; 5 T; 0 U; 0 Other;
                                                                                                                                                                                                              0.4%; Scc...
100.0%; Pred. No. ...
0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Example 15; SEQ ID NO 63; 62pp; English.
                                                                                                                                                                                                                                                                                                          1337 CATTATTTGATCTCTCTCAA 1356
                                                                                                                                                                                                                                                                                                                                                   CATTATTTGATCTCTCTCAA 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                         ADH26728 standard; DNA; 20 BP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                31-MAY-2002; 2002US-00160786.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         31-MAY-2002; 2002US-00160786.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        (first entry)
                                                                                                                                                                                                                   Ouery Match
Best Local Similarity 100.'
Matches 20; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               (ISIS-) ISIS PHARM INC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Freier SM, Dobie KW;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              WPI; 2004-051923/05.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  antiinflammatory.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 US2003225013-A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        11-MAR-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        04-DEC-2003.
                                                                                                                                                                                                                                                                                                                                                   20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ADH26728;
                                                                                                                                                                                                                                                                                                                                                                                                                  RESULT 168
                                                                                                                                                                                                                                                                                                                                                                                                                                      ADH26728,
                                                                                                                                                                                                                                                                                                                                                                                                                                                         8888888888888
                                                                                                                                                                                                                                                                                                                                                셤
                                                                                                                                                                                                                                                                                                            ઠે
```

```
The invention relates to a compound targeted to a nucleic acid molecule encoding human phosphoinositide-3-kinase (PI3K) regulatory subunit 4, p150 p150. The compound is an antisense oligonucleotide that specifically hybridises with a nucleic acid molecule encoding PI3K regulatory subunit 4, p150 and inhibits expression of the polypeptide. The antisense oligonucleotide comprises at least one modified internucleoside linkage i.e. a phosphorothioate linkage, at least one modified augar molety, preferably a 2'-O-methoxyethyl sugar molety, or at least one modified nucleobase comprising a 5-methylcytosine. The antisense compounds are nucleobase comprising a 5-methylcytosine. The antisense compounds are useful for modulating the expression of F13K regulatory subunit 4, p150 and for preventing or treating hyperproliferative disorders and cancer), Chediak-Higashi syndrome, neurodegenerative disorders and cancer). Chediak-Higashi syndrome, neurodegenerative disorders and in preventing or delaying infection or inflammation. This sequence represents an antisense oligonucleotide of the invention.
                                                                                                                                                         ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                           Human PI3K regulatory subunit 4, p150 DNA antisense oligonucleotide #63.
metabolic disorders. These may also be used in research and diagnostics and in preventing or delaying infection or inflammation. This sequence represents an antisense oligonucleotide of the invention.
                                                                                                                                                             Gape
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Human; phosphoinositide-3-kinase regulatory subunit 4; p150; P11K; P13 kinase; se; antisense oligonucleotide; phosphorothioate linkage; 2'-O-methoxyethyl sugar moiety; 5-methyloytosine; hyperproliferative disorder; cancer; Chedlak-Higashi syndrome; neurodegenerative disorder; metabolic disorder; inflammation; cytostatic; immunomodulator; neurodegenerative; antimicrobial;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              New antisense oligonucleotides inhibiting the expression of phosphoinositide-3-kinase, regulatory subunit 4, p150, useful for preventing or treating diseases associated with the subunit, e.g. hyperproliferative disorders.
                                                                                                                                                         ö
                                                                                                                    Length 20;
                                                                                                                                                         0; Indela
                                                                              Sequence 20 BP; 4 A; 6 C; 1 G; 9 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Seguence 20 BP; 7 A; 3 C; 8 G; 2 T; 0 U; 0 Other;
                                                                                                                                      1.4e+02;
                                                                                                                      0.4%; Score 20; DB 1;
                                                                                                                              100.0%; Pred. nv.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Example 15; SEQ ID NO 73; 62pp; English.
                                                                                                                                                                                                3455 AGATGATGGAAAATGCTGAA 3474
                                                                                                                                                                                                                       AGATGATGGAAAATGCTGAA 1
                                                                                                                                                                                                                                                                                                                                         BP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    31-MAY-2002; 2002US-00160786.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         31-MAY-2002; 2002US-00160786
                                                                                                                                                                                                                                                                                                                                         ADH26738 standard; DNA; 20
                                                                                                                                                                                                                                                                                                                                                                                                                        (first entry)
                                                                                                                                                             Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 (ISIS-) ISIS PHARM INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             WPI; 2004-051923/05.
                                                                                                                                      Local Similarity
tes 20; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           antiinflammatory.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       US2003225013-A1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                      11-MAR-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Freier SM,
                                                                                                                                                                                                                                        20
                                                                                                                                                                                                                                                                                                                                                                                ADH26738;
                                                                                                                      Query Match
                                                                                                                                          Best Loca
Matches
                                                                                                                                                                                                                                                                                                                      ADH26738/
  ន្តន្តន្តន
                                                                                                                                                                                                                                                                                                                                                            ð
                                                                                                                                                                                                                               셤
```

```
The invention relates to a compound targeted to a nucleic acid molecule encoding human phosphoinositide-3-kinase (PI3K) regulatory subunit 4, encoding human phosphoinositide-3-kinase (PI3K) regulatory subunit 4, p150. The compound is an antisense oligonucleotide that specifically thy folicises with a nucleic acid molecule encoding PI3K regulatory subunit 4, p150 and inhibits expression of the polypebtide. The antisense compounds at least one modified internucleoside linkage i.e. a phosphorothicate linkage, at least one modified sugar moiety, or at least one modified nucleobase comprising a 5-methylcytosine. The antisense compounds are uncleobase comprising the expression of F13K regulatory subunit 4, p150 useful for modulating the expression of F13K regulatory subunit 4, p150 encer). Chediak-Higashi syndrome, neurodegenerative disorders and metabolic disorders. These may also be used in research and diagnostics metabolic disorders. These may also be used in research and diagnostics and in preventing or delaying infection or inflammation. This sequence represents a P13K regulatory subunit 4, p150 DNA antisense
                                     ô
                                                                                                                                                                                                                                                                                                                                                                   Human; phosphoinositide-3-kinase regulatory subunit 4; p150; P13K; P13 kinase; ds; antisense oligonuclectide; phosphorothioate linkage; 2'-O-methoxyethyl sugar moiety; 5-methylcytosine; hyperproliferative disorder; cancer; Chediak-Higashi syndrome; neurodegenerative disorder; metabolic disorders; inflammation; cytostatic; immunomodulator; neurodegenerative; antimicrobial; antiinflammatory.
                                         Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           New antisense oligonucleotides inhibiting the expression of phosphoinositide-3-kinase, regulatory subunit 4, p150, useful for preventing or treating diseases associated with the subunit, e.g. hyperproliferative disorders.
                                         ö
                                                                                                                                                                                                                                                                                                                                    Human PI3K regulatory subunit 4, p150 DNA target region #34.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Length 20;
Similarity 100.0%; Pred. No. 1.4e+02; 00) Conservative 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Sequence 20 BP; 4 A; 8 C; 3 G; 5 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    0.4%; Score 20; DB 1; Li
ilarity 100.0%; Pred. No. 1.4e+02;
Conservative 0; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Example 15; SEQ ID NO 122; 62pp; English
                                                                                 3991 GGCCTCATCACTTCCTTTGC 4010
                                                                                                     20 GGCCTCATCACTTCCTTTGC 1
                                                                                                                                                                                                                        ADH26787 standard; DNA; 20 BP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          31-MAY-2002; 2002US-00160786.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 31-MAY-2002; 2002US-00160786
                                                                                                                                                                                                                                                                                                       (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         (ISIS-) ISIS PHARM INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Dobie KW;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    WPI; 2004-051923/05.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 US2003225013-A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Homo sapiens
                                                                                                                                                                                                                                                                                                       11-MAR-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         04-DEC-2003
                                             20;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Freier SM,
                                                                                                                                                                                                                                                                 ADH26787;
          Query Match
Best Local 8
                                                                                                                                                                                       RESULT 170
                                             Matches
                                                                                                                                                                                                           ADH26787
```

```
The invention relates to a compound targeted to a nucleic acid molecule encoding human phosphoinositide-3-kinase (PI3K) regulatory subunit 4, concing human phosphoinositide-3-kinase (PI3K) regulatory subunit 4, p150. The compound is an antisense oligonucleotide that specifically for hybridises with a nucleic acid molecule encoding PI3K regulatory subunit 4, p150 and inhibits expression of the polypebtide. The antisense comparison at least one modified internucleoside linkage i.e. a phosphorothicate linkage, at least one modified sugar moiety, preferably a 2'-O-methoxyethyl sugar moiety, or at least one modified or nucleobase comprising a 5-methylcytosine. The antisense compounds are useful for modulating the expression of P13K regulatory subunit 4, p150 and for preventing or treating hyperproliferative disorders and cancer). Chediak-Higashi syndrome, neurodegenerative disorders and cancer. These may also be used in research and diagnostics metabolic disorder: These may also be used in research and diagnostics cand in preventing or delaying infection or inflammation. This sequence represents a P13K regulatory subunit 4, p150 DNA antisense
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Gaps
                                                                                                                                                                                                                                                                              Human; phosphoinositide-3-kinase regulatory subunit 4; p150; P13K; p13 kinase; ds; antisense oligonucleotide; phosphorothioate linkage; 2'-O-methoxyethyl sugar moiety; 5-metholycycaine; hyperproliferative disorder; cancer; Chediak-Higashi syndrome; neurodegenerative disorder; metabolic disorders; inflammation; cytostatic; immunomodulator; neurodegenerative; antimicrobial;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        New antisense oligonucleotides inhibiting the expression of phosphoinositide-3-kinase, regulatory subunit 4, p150, useful for preventing or treating diseases associated with the subunit, e.g. hyperproliferative disorders.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ;
0
                                                                                                                                                                                                                                            Human PI3K regulatory subunit 4, p150 DNA target region #56.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Length 20;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Sequence 20 BP; 4 A; 5 C; 4 G; 7 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       0.4%; Score 20; DB 1; Le
100.0%; Pred. No. 1.4e+02;
:ive 0; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Example 15; SEQ ID NO 144; 62pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        4761 CTGTTTCATGACTGACTGAC 4780
2860 CCTGCCATAGCACAGCTTCT 2879
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1 crerricardacrdacrdac 20
                      1 CCTGCCATAGCACAGCTTCT 20
                                                                                                                                    BP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               31-MAY-2002; 2002US-00160786.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  31-MAY-2002; 2002US-00160786.
                                                                                                                                ADH26809 standard; DNA; 20
                                                                                                                                                                                                               11-MAR-2004 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       20; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          (ISIS-) ISIS PHARM INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Dobie KW;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  WPI; 2004-051923/05.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                            antiinflammatory
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        US2003225013-A1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                   Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            04-DEC-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Freier SM,
                                                                                                                                                                             ADH26809;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Matches
                                                                                                   RESULT 171
                                                                                                                          ADH26809
                                                                                                                                                        g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ò
                                      셤
        ð
```

ö

0; Gaps

0; Indels

Best Local Similarity Matches 20; Conserv

Query Match

20 AGTTGAAGAGAGCAATGGAC 1

```
RESULT 173
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        programmer in the control of the con
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       antisense; inhibitor; hybridisation; human; phosphoinositide-3-kinase; regulatory subunit 4; plS0; internucleoside linkage; phosphorothioate linkage; 2'-O-methoxyethyl sugar; 5-methylcytosine; infection; inflammation; tumour formation; hyperproliferative disorder; cancer; Chediak-Higashi syndrome; metabolic disorder; immunomodulator;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      New antisense compound targeted to a nucleic acid molecule encoding phosphoinositide-3-kinase, regulatory subunit 4, p150, useful for treating cancer, Chediak-Higashi syndrome or a metabolic disorder.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   This invention describes a novel antisense oligonucleotides which
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 /mod_base= OTHER
/note= "phosphorothioate backbone"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sequence 20 BP; 3 A; 7 C; 2 G; 8 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ISIS antisense oligonucleotide ISIS 206977.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Example 15; SEQ ID NO 31; 60pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             cytostatic; gene therapy; ss; primer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Location/Qualifiers
                                                                                                              ADL34585 standard; DNA; 20 BP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            18-SEP-2003; 2003US-00667022.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          31-MAY-2002; 2002US-00160786
                                                                                                                                                                                                                                                                                                                                          (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ಥ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         . .20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Freier SM, Dobie KW;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        WPI; 2004-282523/26.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        (FREI/) FREIER S M.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     (DOBI/) DOBIE K W.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         for gene therapy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   US2004063657-A1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Key
modified_base
                                                                                                                                                                                                                                                                                                                                                17-JUN-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       01-APR-2004.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Synthetic.
                                                                                                                                                                                                                            ADL34585;
RESULT 172
                                                             ADL34585,
```

```
This invention describes a novel antisense oligonucleotides which specifically hybridises to and inhibits the expression of human phosphoinositided-1 kinase, regulatory subunit 4, p150. The coligonucleotides comprises at least one modified internucleoside linkage, preferably a phosphorothioate linkage. It also comprises at least one modified sugar molety, preferably a 2'-O-methoxyethy! sugar molety. The antisense oligonucleotide further comprises at least one modified on uncleobase, preferably a 5-methylcytosine. The antisense oligonucleotide can be used in diagnostics and as research reagents and kits. It can also be used prophylactically, e.g. to prevent or delay infection, inflammation or tumour formation. It can also be used to treat a disease or condition associated with phosphoinositide-3-kinase, regulatory subunit 4, p150, e.g. hyperprofiferative disorder, preferably cancer, chediak-Higsshi syndrome or a metabolic disorder. The products of the invention are immunomodulators with cytostatic activity and can be used
                                                                                                                                                               antisense; inhibitor; hybridisation; human; phosphoinositide-3-kinase; regulatory subunit 4; p150; internucleoside linkage; phosphorothioate linkage; 2'-0-methoxystehyl sugar; 5-methylcytosine; infection; inflammation; tumour formation; hyperproliferative disorder; cancer; Chediak-Higashi syndrome; metabolic disorder; immunomodulator;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        New antisense compound targeted to a nucleic acid molecule encoding phosphoinositide-3-kinase, regulatory subunit 4, p150, useful for treating cancer, Chediak-Higashi syndrome or a metabolic disorder.
                                                                                                                                                                                                                                                                                                                                                                                                                          /note = "phosphorothioate backbone"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Sequence 20 BP; 5 A; 3 C; 4 G; 8 T; 0 U; 0 Other;
                                                                                                                              ISIS antisense oligonucleotide ISIS 206991.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Example 15; SEQ ID NO 45; 60pp; English.
                                                                                                                                                                                                                                                                   cytostatic; gene therapy; ss; primer
                                                                                                                                                                                                                                                                                                                                              Location/Qualifiers
1..20
/*tag= a
                                                                                                                                                                                                                                                                                                                                                                                                        /mod_base= OTHER
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             18-SEP-2003; 2003US-00667022
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 31-MAY-2002; 2002US-00160786
              ADL34599 standard; DNA; 20
                                                                                          17-JUN-2004 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Freier SM, Dobie KW;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      WPI; 2004-282523/26.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     (FREI/) FREIER S M. (DOBI/) DOBIE K W.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           for gene therapy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  US2004063657-A1.
                                                                                                                                                                                                                                                                                                                                                Key
modified_base
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       01-APR-2004.
                                                                                                                                                                                                                                                                                                           Synthetic
                                                      ADL34599;
ADL34599,
```

Query Match

0.4%; Score 20; DB
Best Local Similarity 100.0%; Pred. No. 1.4
Matches 20; Conservative 0; Mismatches

ö

Gaps

ö

0.4%; Score 20; DB 1; Length 20; 100.0%; Pred. No. 1.4e+02; ive 0; Mismatches 0; Indels

ô

Gарв

ô

ö DB 1; Le

Length 20; Indels

1268 AGTTGAAGAGCAATGGAC 1287

Local Similarity 100. 108 20; Conservative

Best Loc Matches

Query Match

```
This invention describes a novel antisense oligonucleotides which specifically hybridises to and inhibits the expression of human phosphoinostitide-3-kinase, regulatory subunit 4, p150. The phosphoinostitide-3-kinase, regulatory subunit 4, p150. The oligonucleotides comprises at least one modified internucleoside linkage, preferably a phosphorothioate linkage. It also comprises at least one modified sugar molety, preferably a 2-0-methoxyethy1 sugar molety. The antisense oligonucleotide further comprises at least one modified nucleobase, preferably a 5-methy1cytosine. The antisense oligonucleotide can be used in diagnostics and as research reagents and kits. It can also be used prophylactically, e.g. to prevent or glapy infection, inflammation or tumour formation. It can also be used to treat a disease or condition associated with phosphoinostide-3-kinase, regulatory subunit 4, p150, e.g. hyperproliferative disorder, preferably cancer, chediak-Higashi syndrome or a metabolic disorder, preferably cancer, invention are immunomodulators with cytostatic activity and can be used
                                                                                                                                                                                                                                                       antisense; inhibitor; hybridisation; human; phosphoinositide-3-kinase; regulatory subunit 4; p150; internucleoside linkage; bhosphorothioare linkage; 2'-O-methoxyethyl sugar; 5-methylcytosine; infection; inflammation; themour formation; hyperproliferative disorder; cancer; Chediak-Higashi syndrome; metabolic disorder; immunomodulator;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         New antisense compound targeted to a nucleic acid molecule encoding phosphoinositide-3-kinase, regulatory subunit 4, p150, useful for treating cancer, Chediak-Higashi syndrome or a metabolic disorder.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            /note= "phosphorothioate backbone"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Sequence 20 BP; 7 A; 5 C; 3 G; 5 T; 0 U; 0 Other;
                                                                                                                                                                                                                         ISIS antisense oligonucleotide ISIS 206995.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Example 15; SEQ ID NO 49; 60pp; English
                                                                                                                                                                                                                                                                                                                                                            cytostatic; gene therapy; ss; prime:
                                                                                                                                                                                                                                                                                                                                                                                                                                 Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      /mod_base= OTHER
CTTAATATGGAAAATGACCC
                                                                                                               BP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       18-SEP-2003; 2003US-00667022
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             31-MAY-2002; 2002US-00160786
                                                                                                                                                                                                                                                                                                                                                                                                                                                       1. .20
/*tag= a
                                                                                                             ADL34603 standard; DNA; 20
                                                                                                                                                                                        (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Freier SM, Dobie KW;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          WPI; 2004-282523/26.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                (PREI/) FREIER S M. (DOBI/) DOBIE K W.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              for gene therapy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   US2004063657-A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                   modified base
                                                                                                                                                                                        17-JUN-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      01-APR-2004
                                                                                                                                                                                                                                                                                                                                                                                                  Synthetic
                                                                                                                                                    ADL34603;
```

```
This invention describes a novel antisense oligonucleotides which specifically hybridises to and inhibits the expression of human phosphoinosited-3-kinase, regulatory subunit 4, p150. The phosphoinosited de-3-kinase, regulatory subunit 4, p150. The coligonucleotides comprises at least to me modified internucleoside linkage, preferably a phosphorothioate linkage. It also comprises at least one modified sugar molety, preferably a 2'-O-methoxyethyl sugar molety. The antisense oligonucleotide further comprises at least one modified uncleobase, preferably a S-methylcytosine. The antisense oligonucleotide can be used in diagnostics and as research reagents and kits. It can also be used prophylactically, e.g. to prevent or delay infection, inflammation or tumour formation. It can also be used to treat a disease or condition associated with phosphoinositide-3-kinase, regularory subunit 4, p150, e.g. hyperproliferative disorder, preferably cancer, chediak-Higashi syndrome or a metabolic disorder. The products of the invention are immunomodulators with cytostatic activity and can be used
                                                                                                                                                                                                                                                                                    antisense; inhibitor; hybridisation; human; phosphoinositide-3-kinase; regulatory subunit 4; p150; internucleoside linkage; phosphorothioare linkage; 2'-O-methoxyethyl sugar; 5-methylcytosine; infection; inflammation; tumour formation; hyperproliferative disorder; cancer; Chediak-Higashi syndrome; metabolic disorder; immunomodulator; cytostatic; gene therapy; ss; primer.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            New antisense compound targeted to a nucleic acid molecule encoding phosphoinositide-3-kinase, regulatory subunit 4, p150, useful for treating cancer, Chediak-Higashi syndrome or a metabolic disorder.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Query Match 0.4%; Score 20; DB 1; Length 20; Best Local Similarity 100.0%; Pred. No. 1.4e+02; Matches 20; Conservative 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           /note= "phosphorothioate backbone"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Sequence 20 BP; 6 A; 5 C; 2 G; 7 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                       ISIS antisense oligonucleotide ISIS 207002.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Example 15; SEQ ID NO 56; 60pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Location/Qualifiers
2524 GTTTACGAATTTGCCAGTGA 2543
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1. .20
/*tag= a
/mod_base= OTHER
                    GTTTACGAATTTGCCAGTGA 1
                                                                                                                                       ADL34610 standard; DNA; 20 BP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       31-MAY-2002; 2002US-00160786.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             18-SEP-2003; 2003US-00667022
                                                                                                                                                                                                                      17-JUN-2004 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Freier SM; Dobie KW;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              WPI; 2004-282523/26.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               (FREI/) FREIER S M.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 (DOBI/) DOBIE K W.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          for gene therapy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     US2004063657-A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   modified base
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            01-APR-2004.
                                                                                                                                                                                                                                                                                                                                                                                                                                          Synthetic.
                                       20
                                                                                                                                                                                 ADL34610;
                                                                                                      RESULT 175
                                                                                                                        ADL34610,
                                                                                                                                                            음
```

ö

Gaps

. 0

ö

Gaps

ö

Query Match 0.4%; Score 20; DB 1; Length 20; Best Local Similarity 100.0%; Pred. No. 1.4e+02; Matches 20; Conservative 0; Mismatches 0; Indels

gibbs-10-667-022-4.rng

ö

Gарв

ö

Indels

ö

0; Mismatches

Conservative

20;

Matches

```
This invention describes a novel antisense oligonucleotides which specifically hybridises to and inhibits the expression of human phosphoinositide-3-kinase, regulatory subunit 4, piso. The oligonucleotides comprises at least one modified internucleoside linkage, preferably a comprises at least one modified internucleoside linkage, or modified sugar molety, preferably a 2'-O-methoryethyl sugar molety. The antisense oligonucleotide further comprises at least one modified nucleobase, preferably a 5-methylcytosine. The antisense oligonucleotide further comprises at least one modified can be used in diagnostics and as research reagents and kits. It can also be used prophylactically, e.g. to offer the completion of the completion or tumour formation. It can also be used to treat a disease or condition associated with phosphoinositide-3-kinase, regulatory combunit 4, piso, e.g. hyperproliferative disorder, preferably cancer, chediak-Higashi syndrome or a metabolic disorder. The products of the invention are immunomodulators with cytostatic activity and can be used
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  antisense; inhibitor; hybridisation; human; phosphoinositide-3-kinase; regulatory subunit 4; pl50; internucleoside linkage; phosphorothioate linkage; 2'-0-methoxyethyl sugar; 5-methylcytosine; infection; inflammation; tumour formation; hyperproliferative disorder; cancer; Chediak-Higashi syndrome; metabolic disorder; immunomodulator;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  New antisense compound targeted to a nucleic acid molecule encoding phosphoinositide-3-kinase, regulatory subunit 4, p150, useful for treating cancer, Chediak-Higashi syndrome or a metabolic disorder.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 /note= "phosphorothioate backbone"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Sequence 20 BP; 6 A; 5 C; 3 G; 6 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ISIS antisense oligonucleotide ISIS 207037.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Example 15; SEQ ID NO 83; 60pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     cytostatic; gene therapy; ss; primer.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Location/Qualifiers
3009 TCAGAAGGTGTAATTGACT 3028
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            /mod_base= OTHER
                                                                   rcagaaaggrgraarrgacr 1
                                                                                                                                                                                                                                                      ВÞ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  18-SEP-2003; 2003US-00667022.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         31-MAY-2002; 2002US-00160786.
                                                                                                                                                                                                                                                  ADL34637 standard; DNA; 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1. .20
/*tag= a
                                                                                                                                                                                                                                                                                                                                                                                            (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Freier SM, Dobie KW;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           WPI; 2004-282523/26
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        (FREI/) FREIER S M. (DOBI/) DOBIE K W.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 for gene therapy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        US2004063657-A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Key
modified_base
                                                                                                                                                                                                                                                                                                                                                                                            17-JUN-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           01-APR-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Synthetic.
                                                                                                                                                                                                                                                                                                                         ADL34637;
                                                                   20
                                                                                                                                                                       RESULT 17, 4 ADL34637/17, 5 ADL34637
ઠે
                                                       a
```

```
This invention describes a novel antisense oligonucleotides which specifically hybridises to and inhibits the expression of human phosphoinositide-3-kinase, regulatory subunit 4, p150. The oligonucleotides comprises at least one modified internucleoside linkage, preferably a phosphorothioate linkage. It also comprises at least one modified modified sugar molety, preferably a 2'-O-methoxyethyl sugar molety. The artisense oligonucleotide further comprises at least one modified nucleobase, preferably a 5-methylcytosine. The antisense oligonucleotide further comprises at least one modified can be used in diagnostics and as research reagents and kits. It can also be used prophylactically, e.g. to prevent or delay infection, inflammation or tumour formation. It can also be used to treat a disease or condition associated with phosphoinositide-3-kinase, regulatory subunit 4, p150, e.g. hyperproliferative disorder, preferably cancer, chediak-Higashi syndrome or a metabolic disorder. The products of the invention are immunomodulators with cytostatic activity and can be used
                                                                                                                                                                                                                                                                                       antisense; inhibitor; hybridisation; human; phosphoinositide-3-kinase; regulatory subunit 4; p150; internucleoside linkage; phosphorothioate linkage; 2'-0-methoxystehy] sugar; 5-methylcytosine; infection; inflammation; tumour formation; hyperproliferative disorder; cancer; Chediak-Higashi syndrome; metabolic disorder; immunomodulator;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       a nucleic acid molecule encoding
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     New antisense compound targéted to a nucleic acid molecule encodin
phosphoinositide-3-kinase, regulatory subunit 4, p150, useful for
treating cancer, Chediak-Higashi syndrome or a metabolic disorder.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                /mod_base= OTHER
/note= "phosphorothioate backbone"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Sequence 20 BP; 5 A; 4 C; 3 G; 8 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                     ISIS antisense oligonucleotide ISIS 207038.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Example 15; SEQ ID NO 84; 60pp; English
                                                                                                                                                                                                                                                                                                                                                                                            cytostatic; gene therapy; ss; primer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Location/Qualifiers
  4461 TGAAGTTGTCCAGGAAATTC 4480
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              base= OTHER
                                                                                                                                     ADL34638 standard; DNA; 20 BP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        31-MAY-2002; 2002US-00160786.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  18-SEP-2003; 2003US-00667022
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ø
                                                                                                                                                                                                                17-JUN-2004 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1. .20
/*tag=
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Dobie KW;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              WPI; 2004-282523/26.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               FREI/) FREIER S M.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   DOBI/) DOBIE K W.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    for gene therapy.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         US2004063657-A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      modified_base
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             01-APR-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Freier SM,
                                                                                                                                                                                                                                                                                                                                                                                                                                   Synthetic
                                                                                                                                                                        ADL34638;
8
                                    유
```

DB 1; Length 20;

0.4%; Score 20;

Query Match

Score 20; DB 1; Length 20; Pred. No. 1.4e+02;

0.4%; S 100.0%;

Query Match Best Local Similarity

윤 ઠે

```
This invention describes a novel antisense oligonucleotides which specifically hybridises to and inhibits the expression of human phosphoinositide 3-kinase, regulatory subunit 4, p150. The phosphoinositide 3-kinase, regulatory subunit 4, p150. The coligonucleotides comprises at least one modified internucleoside linkage, preferably a phosphorothioate linkage. It also comprises at least one modified sugar moiety, preferably a 2'-O-methoxyethyl sugar moiety. The modified sugar moiety, preferably a 2'-Methoxyethyl sugar moiety. The nucleobase, preferably a S-methylcytosine. The antisense oligonucleotide nucleobase, preferably as research reagents and kits. It can also be used prophylactically, e.g. to prevent or delay infection, inflammation or tumour formation. It can also be used to treat a disease or condition associated with phosphoinositide-3-kinase, regulatory subunit 4, p150, e.g. hyperproliferative disorder, preferably cancer, chediak-Higashi syndrome or a metabolic disorder. The products of the invention are immunomodulators with cytostatic activity and can be used
                                                         ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                regulatory subunit 4; pis0; internucleoside linkage; phosphorothioate linkage; 2'-O-methoxyethyl sugar; 5-methylcytosine; infection; inflammation; tumour formation; hyperproliferative disorder; cancer; Chediak-Higashi syndrome; metabolic disorder; immunomodulator;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             antisense; inhibitor; hybridisation; human; phosphoinositide-3-kinase;
                                                         Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            New antisense compound targeted to a nucleic acid molecule encoding phosphoinositide-1-kinase, regulatory subunit 4, p150, useful for treating cancer, Chediak-Higashi syndrome or a metabolic disorder.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Phosphoinositide-3-kinase regulatory subunit 4 p150 fragment 124607.
                                                         ;
0
                                                             Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Sequence 20 BP; 6 A; 5 C; 5 G; 4 T; 0 U; 0 Other;
                       Pred. No. 1.4e+02;
; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Example 15; SEQ ID NO 100; 60pp; English.
                                                                                                                                      4633 GIGIGGAAATAAAACCTACT 4652
100.0%; FIL
                                                                                                                                                                                20 GTGTGGAAATAAAACCTACT
                                                                                                                                                                                                                                                                                                                                                                                                    ADL34654 standard; DNA; 20 BP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   18-SEP-2003; 2003US-00667022.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                31-MAY-2002; 2002US-00160786
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              cytostatic; gene therapy; ds
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  (first entry)
                              Best Local Similarity 100.
Matches 20; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Freier SM, Dobie KW;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      WPI; 2004-282523/26.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     (FREI/) FREIER S M. (DOBI/) DOBIE K W.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         for gene therapy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            US2004063657-A1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 01-APR-2004.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  17-JUN-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ADL34654;
                                                                                                                                                                                                                                                                                                                               RESULT 17
ADL24654
ADL2654
AD
```

```
This invention describes a novel antisense oligomucleotides which specifically hybridises to and inhibits the expression of human specifically hybridises to and inhibits the expression of human collapse of the state of the phosphoinositide-3-kinase, regulatory subunit 4, piso. The collapse of collapse of the state o
                                                                                                                                                                                                                                                                                                                                                         antisense; inhibitor; hybridisation; human; phosphoinositide-3-kinase; regularory subunit 4; p150; internucleoside linkage; phosphorothioate linkage; 2'-O-methoxyethyl sugar; 5-methylcytosine; infection; inflammation; tumour formation; hyperproliferative disorder; cancer; Chediak-Higashi syndrome; metabolic disorder; immunomodulator; cytostatic; gene therapy; ds.
                                                                                                                                                                                                                                                                                                                 Phosphoinositide-3-kinase regulatory subunit 4 p150 fragment 124609.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         New antisense compound targeted to a nucleic acid molecule encodir
phosphoinositide-3-kinase, regulatory subunit 4, p150, useful for
treating cancer, Chediak-Higashi syndrome or a metabolic disorder.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Sequence 20 BP; 4 A; 3 C; 8 G; 5 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Example 15; SEQ ID NO 102; 60pp; English.
1 GCACACAAATCTGGAGTTCG 20
                                                                                                                                                  BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        18-SEP-2003; 2003US-00667022.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   31-MAY-2002; 2002US-00160786
                                                                                                                                                  ADL34656 standard; DNA; 20
                                                                                                                                                                                                                                                                        17-JUN-2004 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Dobie KW;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             WPI; 2004-282523/26.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              (FREI/) FREIER S M. (DOBI/) DOBIE K W.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 for gene therapy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           US2004063657-A1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      01-APR-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Freier SM,
                                                                                                                                                                                                                   ADL34656;
                                                                                             RESULT 179
                                                                                                                               ADL34656
                                                                                                                                                                                                                셤
```

g

ö

Gaps

; 0

ö

Gaps

;

0.4%; Score 20; DB 1; Length 20; 100.0%; Pred. No. 1.4e+02; tive 0; Mismatches 0; Indels

20; Conservative

Matches

Local Similarity

Query Match

RESULT 180 ADL34659

982 GCACACAAATCTGGAGTTCG 1001

Query Match 0.4%; Score 20; DB 1; Length 20; Best Local Similarity 100.0%; Pred. No. 1.40+02; Matches 20; Conservative 0; Mismatches 0; Indels

```
31-APR-2004
                                                                                                                                                                                                                                                                                                                    Freier SM,
                                                                                                                                                                                                                                                                           (FREI/)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                RESULT 182
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ADL3467
  ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     This invention describes a novel antisense oligonucleotides which specifically hybridises to and inhibits the expression of human phosphoinositide-3-kinase, regulatory subunit 4, p150. The oligonucleotides comprises at least one modified internucleoside linkage, preferably a phosphorothioate linkage. It also comprises at least one modified sugar molety, preferably a 2-0-methoxyethyl sugar molety. The antisense oligonucleotide further comprises at least one modified nucleobase, preferably a 5-methylcytosine. The antisense oligonucleotide further comprises at least one modified nucleobase, preferably a 5-methylcytosine. The antisense oligonucleotide in inflammation of tumour formation. It can also be used prophylactically, e.g. to prevent or delay infection, inflammation or tumour formation. It can also be used to treat a disease or condition associated with phosphoinositide-3-kinase, regulatory subunit 4, p150, e.g. hyperproliferative disorder, preferably cancer, chediak-Higashi syndrome or a metabolic disorder. The products of the invention are immunomodulators with cytostatic activity and can be used
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ö
                                                                                                     antisense; inhibitor; hybridisation; human; phosphoinositide-3-kinase; regulatory subunit 4; p150; internucleoside linkage; phosphorothioate linkage; 2'-0-methoxyethyl sugar; 5-methylcytosine; infection; inflammation; tumour formation; hyperproliferative disorder; cancer; Chediak-Higashi syndrome; metabolic disorder; immunomodulator; cytostatic; gene therapy; ds.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Gaps
                                                                               Phosphoinositide-3-kinase regulatory subunit 4 p150 fragment 124614.
                                                                                                                                                                                                                                                                                                                                                                                                                                          New antisense compound targeted to a nucleic acid molecule encoding phosphoinositide-3-kinase, regulatory subunit 4, p150, useful for treating cancer, Chediak-Higashi syndrome or a metabolic disorder.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       0.4%; Score 20; DB 1; Length 20; 100.0%; Pred. No. 1.4e+02; ive 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Seguence 20 BP; 4 A; 2 C; 8 G; 6 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Example 15; SEQ ID NO 105; 60pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1299 AGGTTGTGTGATAGCTGAGC 1318
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AGGTTGTGTGATAGCTGAGC
 ADL34659 standard; DNA; 20 BP
                                                                                                                                                                                                                                                                                      18-SEP-2003; 2003US-00667022.
                                                                                                                                                                                                                                                                                                                  31-MAY-2002; 2002US-00160786
                                                    (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Local Similarity 100.
                                                                                                                                                                                                                                                                                                                                                                                      Freier SM, Dobie KW;
                                                                                                                                                                                                                                                                                                                                                                                                               WPI; 2004-282523/26.
                                                                                                                                                                                                                                                                                                                                            FREI/) FREIER S M.
                                                                                                                                                                                                                                                                                                                                                          (DOBI/) DOBIE K W.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    gene therapy
                                                                                                                                                                                                                                 JS2004063657-A1.
                                                                                                                                                                                                         Homo sapiens.
                                                      17-JUN-2004
                                                                                                                                                                                                                                                            01-APR-2004.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       for
ઠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      셤
```

```
This invention describes a novel antisense oligonucleotides which specifically hybridises to and inhibits the expression of human phosphoinositide-1-kinase, regulatory subunit 4, p150. The phosphoinositides at least one modified internucleoside linkage, oligonucleotides comprises at least to emodified internucleoside linkage, preferably a phosphorothioate linkage. It also comprises at least one modified antisense oligonucleotide further comprises at least one modified antisense oligonucleotide further comprises at least one modified nucleobase, preferably a 5-methylcytosine. The antisense oligonucleotide can be used in diagnostics and as research reagents and kits. It can also be used prophylactically, e.g. to prevent or delay infection, inflammation or tumour formation. It can also be used to treat a disease or condition associated with phosphoinositide-3-kinase, regulatory subunit 4, p150, e.g. hyperproliferative disorder, preferably cancer, chediak-Higashi syndrome or a metabolic disorder. The products of the invention are immunomodulators with cytostatic activity and can be used
                                                                antisense; inhibitor; hybridisation; human; phosphoinositide-3-kinase; regulatory subunit 4; p150; internucleoside linkage; phosphorochioate linkage; 2'-O-methoxyethyl sugar; 5-methylcytosine; infection; inflammation; tumour formation; hyperproliferative disorder; cancer; Chediak-Higashi syndrome; metabolic disorder; immunomodulator;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     antisense; inhibitor; hybridisation; human; phosphoinositide-3-kinase;
regulatory subunit 4; p150; internucleoside linkage;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Gapa
Phosphoinositide-3-kinase regulatory subunit 4 p150 fragment 124616.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Phosphoinositide-3-kinase regulatory subunit 4 p150 fragment 124637.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       New antisense compound targeted to a nucleic acid molecule encodin
phosphoinositide-3-kinase, regulatory subunit 4, p150, useful for
treating cancer, Chediak-Higashi syndrome or a metabolic disorder.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            .
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       0.4%; Score 20; DB 1; Length 20;
100.0%; Pred. No. 1.4e+02;
rative 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Sequence 20 BP; 8 A; 3 C; 4 G; 5 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Example 15; SEQ ID NO 106; 60pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1414 GATCACAGTATCAGAGAATT 1433
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GATCACAGTATCAGAGATT 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ADL34677 standard; DNA; 20 BP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            18-SEP-2003; 2003US-00667022.
                                                                                                                                                                                                                                                                      cytostatic; gene therapy; ds
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         31-MAY-2002; 2002US-00160786.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    17-JUN-2004 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Query Match 0.4
Best Local Similarity 100.
Matches 20; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Dobie KW;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       WPI; 2004-282523/26.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         FREIER S M.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          (DOBI/) DOBIE K W.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          for gene therapy.
                                                                                                                                                                                                                                                                                                                                                                                                                           US2004063657-A1
                                                                                                                                                                                                                                                                                                                                                  Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ADL34677;
```

ADL34660 standard; DNA; 20 BP.

RESULT 181

(first entry)

17-JUN-2004

ADL34660;

ADL34660 ID ADL3 XX AC ADL3 XX DT 17-J

Homo sapiens.

```
This invention describes a novel antisense oligonuclectides which specifically hybridises to and inhibits the expression of human specifically hybridises to and inhibits the expression of human constitute. 3-kinase, regulatory subunit 4, piso. The phosphoinositide comprises at least one modified internucleoside linkage, collsgonuclectides comprises at least one preferably a phosphorothicate linkage. It also comprises at least one modified sugar mojety, preferably a 2'-O-methoxyethyl sugar mojety. The antisense oligonuclectide further comprises at least one modified uncleobase, preferably a S-methoxyetyles at least one modified uncleobase, preferably a S-methoxyetyles at least one modified incleobase, preferably a S-methoxyetyles at least one modified incleobase, preferably a S-methoxyetyles at least one modified incleobase, preferably a S-methoxyetyles at least one modified inflammation or tumour formation. It can also be used to treat a disease or condition associated with phosphoinositide-1-kinase, regulatory subunit 4, piso, e.g. hyperproliferative disorder, preferably cancer, cancer, the products of the control of the control are metabolic disorder. The products of the control of the control are immunomodulators with cytostatic activity and can be used
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    regulatory subunit 4; p150; intermucleoside linkage; phosphoinositide-3-kinase; phosphorothioate linkage; 2'-0-methoxyethyl sugar; 5-methylcytosine; infection; inflammation; tumour formation; hyperproliferative disorder; cancer; Chediak-Higashi syndrome; metabolic disorder; immunomodulator;
phosphorothioate linkage, 2'-O-methoxyethyl sugar; 5-methylcytosine; infection; inflammation; tumour formation; hyperproliferative disorder; cancer; Chediak-Higashi syndrome; metabolic disorder; immunomodulator; cytostatic; gene therapy; ds.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         0; Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Phosphoinositide-3-kinase regulatory subunit 4 p150 fragment 124669.
                                                                                                                                                                                                                                                                                                                                                                                                                                                         New antisense compound targeted to a nucleic acid molecule encoding phosphoinositide-3-kinase, regulatory subunit 4, p150, useful for treating cancer, Chediak-Higashi syndrome or a metabolic disorder.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         DB 1; Length 20;
1.4e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Sequence 20 BP; 8 A; 3 C; 6 G; 3 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Example 15; SEQ ID NO 123; 60pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    0.4%; Score 20;
100.0%; Pred. No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    2913 AGAGGAAGACAAACTICIGG 2932
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Acadeaachahacrrcree 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     cytostatic; gene therapy; ds
                                                                                                                                                                                                                                      .8-SEP-2003; 2003US-00667022.
                                                                                                                                                                                                                                                                               31-MAY-2002; 2002US-00160786.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ADL34700 standard; DNA; 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Local Similarity 100.
Les 20; Conservative
                                                                                                                                                                                                                                                                                                                                                                                      Freier SM, Dobie KW;
                                                                                                                                                                                                                                                                                                                                                                                                                           WPI; 2004-282523/26.
                                                                                                                                                                                                                                                                                                                         (FREI/) FREIER S M.
                                                                                                                                                                                                                                                                                                                                               (DOBI/) DOBIE K W.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      for gene therapy
                                                                                                                                                            JS2004063657-A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     17-JUN-2004
                                                                                                                   Homo sapiens
                                                                                                                                                                                                   01-APR-2004.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ADL34700;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 RESULT 183
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    셤
```

```
This invention describes a novel antisense oligonucleotides which specifically hybridises to and inhibits the expression of human consisted of the specifically hybridises to and inhibits the expression of human consisted of the specifically hybridises to an inhibits the expression of human colly mount of the specifical preferably a consistent of the specific of th
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ô
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      antisense; inhibitor; hybridisation; human; phosphoinositide-3-kinase; regulatory subunit 4; p150; internucleoside linkage; phosphorothioate linkage; 2'-0-methoxystehryl sugar; 5-methylcytosine; infection; inflammation; tumour formation; hyperproliferative disorder; cancer; Chediak-Higashi syndrome; metabolic disorder; immunomodulator; cytostatic; gene therapy; ss; primer.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Gaps
                                                                                                                                                                                                                                                                                                                                                                                                    New antisense compound targeted to a nucleic acid molecule encoding phosphoinositide-3-kinase, regulatory subunit 4, p150, useful for treating cancer, Chediak-Higashi syndrome or a metabolic disorder.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    .;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  0.4%; Score 20; DB 1; Length 20;
100.0%; Pred. No. 1.4e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Sequence 20 BP; 8 A; 2 C; 4 G; 6 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ISIS antisense oligonucleotide ISIS 206994.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             100.0%; Prec. nc. -
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Example 15; SEQ ID NO 146; 60pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           4811
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1 caaaargerraagargracr 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           4792 CAAAATGGTTAAGATGTACT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         BP.
                                                                                                                                     18-SEP-2003; 2003US-00667022.
                                                                                                                                                                                       31-MAY-2002; 2002US-00160786.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    .602/c
ADL34602 standard; DNA; 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            17-JUN-2004 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ø
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Query Match
Best Local Similarity 100.
Matches 20, Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               /*tag=
                                                                                                                                                                                                                                                                                                                   reier SM, Dobie KW;
                                                                                                                                                                                                                                                                                                                                                                  WPI; 2004-282523/26
                                                                                                                                                                                                                                            (FREI/) FREIER S M.
                                                                                                                                                                                                                                                                   (DOBI/) DOBIE K W.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 for gene therapy
                                            US2004063657-A1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Key
modified_base
                                                                                              01-APR-2004.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Synthetic.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ADL34602;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         RESULT 184
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ADL34602/
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                d
```

/mod\_base= OTHER /note= "phosphorothioate backbone"

OTHER

base=

Dobie KW;

/\*tag= a

```
This invention describes a novel antisense oligonucleotides which specifically hybridises to and inhibits the expression of human phosphoinositide3-kinase, regulatory subunit 4, p150. The phosphoinositide 3-kinase, regulatory subunit 4, p150. The oligonucleotides comprises at least one modified internucleoside linkage, preferably a phosphorothioate linkage. It also comprises at least one modified and modety, preferably a 2'-O-methoxyethyl sugar modety. The antisense oligonucleotide further comprises at least one modified nucleobase, preferably a 5-methylcytosine. The antisense oligonucleotide can be used in diagnostics and as research reagents and kits. It can also be used prophylactically, e.g. to prevent or delay infection, inflammation or tumour formation. It can also be used to treat a disease or condition associated with phosphoinositide-3-kinase, regulatory subunit 4, p150, e.g. hyperprofiferative disorder, preferably cancer, chediak-Higashi syndrome or a metabolic disorder. The products of the invention are immunomodulators with cytostatic activity and can be used
                                                                                                                                                                                                                                                                                                                                                        New antisense compound targeted to a nucleic acid molecule encoding phosphoinositide-3-kinase, regulatory subunit 4, p150, useful for treating cancer, Chediak-Higashi syndrome or a metabolic disorder.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Query Match

0.4%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 1.4e+02;
Matches 20; Conservative 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Sequence 20 BP; 6 A; 7 C; 4 G; 3 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                      Example 15; SEQ ID NO 51; 60pp; English.
                                                                                                                                                                                        31-MAY-2002; 2002US-00160786.
                                                                                                                                                   18-SEP-2003; 2003US-00667022.
                                                                                                                                                                                                                                                                                                                      WPI; 2004-282523/26.
                                                                                                                                                                                                                            (FREI/) FREIER S M.
                                                                                                                                                                                                                                               DOBIE K W.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 for gene therapy.
                                                                          US2004063657-A1.
                                                                                                                01-APR-2004
                                                                                                                                                                                                                                                                                     Freier SM,
                                                                                                                                                                                                                                            (DOBI/)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               RESULT 186
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ADL34651
 ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                  This invention describes a novel antisense oligonucleotides which specifically hybridises to and inhibits the expression of human phosphoinositide-3-kinase, regulatory subunit 4, p150. The oligonucleotides comprises at least one modified internucleoside linkage, preferably a phosphorothioate linkage. It also comprises at least one modified sugar molety, preferably a 2-0-methoxyethyl sugar molety. The antisense oligonucleotide further comprises at least one modified nucleobase, preferably a 5-methylcytosine. The antisense oligonucleotide can be used prophylactically, e.g. to prevent or delay infection, inflammation or tumour formation. It can also be used prophylactically, e.g. to prevent or delay infection, inflammation associated with phosphoinositide-3-kinase, regulatory compunit 4, p150, e.g. hyperproliferative disorder, preferably cancer, chediak-Higashi syndrome or a metabolic disorder. The products of the invention are immunomodulators with cytostatic activity and can be used
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               antisense; inhibitor; hybridisation; human; phosphoinositide-3-kinase; regulatory subunit 4; p150; internucleoside linkage; phosphorochioare linkage; 2'-O-methoxyethyl sugar; 5-methylcytosine; infection; inflammation; tumour formation; hyperproliferative disorder; cancer; Chediak-Higashi syndrome; metabolic disorder; immunomodulator;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Gaps
                                                                                                                                                                                                                                                                                                                                        New antisense compound targeted to a nucleic acid molecule encoding phosphoinositide-3-kinase, regulatory subunit 4, p150, useful for treating cancer, Chediak-Higashi syndrome or a metabolic disorder.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Score 20; DB 1; Length 20;
Pred. No. 1.4e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          0; Indels
                   /note= "phosphorothioate backbone"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sequence 20 BP; 8 A; 6 C; 1 G; 5 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         0.4%; Scor.
100.0%; Pred. No. 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ISIS antisense oligonucleotide ISIS 206997.
                                                                                                                                                                                                                                                                                                                                                                                                                   Example 15; SEQ ID NO 48; 60pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   cytostatic; gene therapy; ss; primer.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 2438 TTAGTGATGCTGAGGAATTT 2457
 /mod base= OTHER
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    20 Tragigardricheagaarri 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ADL34605 standard; DNA; 20 BP
                                                                                                                               18-SEP-2003; 2003US-00667022.
                                                                                                                                                                     31-MAY-2002; 2002US-00160786
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Conservative
                                                                                                                                                                                                                                                                 Freier SM, Dobie KW;
                                                                                                                                                                                                                                                                                                     WPI; 2004-282523/26.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Similarity
                                                                                                                                                                                                        (FREI/) FREIER S M. (DOBI/) DOBIE K W.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               for gene therapy.
                                                         US2004063657-A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           modified base
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            17-JUN-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        20;
                                                                                            01-APR-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Synthetic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ADL34605;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              RESULT 185
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ADL34605,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ઠ
```

```
antisense; inhibitor; hybridisation; human; phosphoinositide-3-kinase; regulatory subunit 4; p150; internucleoside linkage; phosphorothioate linkage; 2'-O-methoxyethyl sugar; 5-methylcytosine; infection; inflammation; tumour formation; hyperproliferative disorder; cancer; Chediak-Higashi syndicme; metabolic disorder; immunomodulator; cytostatic; gene therapy; ds.
                                                                                                                                                                                                                         Phosphoinositide-3-kinase regulatory subunit 4 p150 fragment 124604.
2587 GGTGCCGTGGGATTTATCAC 2606
                   GGTGCCGTGGGATTTATCAC 1
                                                                                                                 ADL34651 standard; DNA; 20 BP
                                                                                                                                                                                       17-JUN-2004 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                US2004063657-A1
                                                                                                                                                                                                                                                                                                                                                                                Homo sapiens
                                                                                                                                                     ADL34651;
                                 20
```

ö

Gape

```
g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ò
                                                                                                                                                                                                                                                                                                                                                                                     This invention describes a novel antisense oligonucleotides which specifically hybridises to and inhibits the expression of human phosphoinositide.3 *timase, regulatory subunit 4, p150. The oligonucleotides comprises at least one modified internucleoside linkage, oligonucleotides comprises at least come modified internucleoside linkage, preferably a 2'-O-methoxyethyl sugar moiety. The antisense oligonucleotide further comprises at least one moiety. The antisense oligonucleotide further comprises at least one modified nucleobase, preferably a 5-methylcytosine. The antisense oligonucleotide can be used in diagnostics and as research reagents and kits. It can also be used prophylactically, e.g. to prevent or delay infection, inflammation or tumour formation. It can also be used to treat a disease or condition associated with phosphoinositide-3*tinase, regulatory subunit 4, p150, e.g. hyperproliferative disorder. preferably cancer, chediak Higashi syndrome or a metabolic disorder. The products of the invention are immunomodulators with cytostatic activity and can be used
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     antisense; inhibitor; hybridisation; human; phosphoinositide-3-kinase; regulatory subunit 4; p150; internucleoside linkage; phosphorothioate linkage; 2'-0-methoxystchyl sugar; 5-methylcytosine; infection; inflammation; tumour formation; hyperproliferative disorder; cancer; Chediak-Higashi syndrome; metabolic disorder; immunomodulator;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Phosphoinositide-3-kinase regulatory subunit 4 p150 fragment 124631.
                                                                                                                                                                                                                                                                        New antisense compound targeted to a nucleic acid molecule encoding phosphoinositide-3-kinase, regulatory subunit 4, p150, useful for treating cancer, Chediak-Higashi syndrome or a metabolic disorder.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Query Match 0.4%; Score 20; DB 1; Length 20; Best Local Similarity 100.0%; Pred. No. 1.4e+02; Matches 20; Conservative 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Sequence 20 BP; 8 A; 5 C; 3 G; 4 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                          Example 15; SEQ ID NO 97; 60pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  824 CTTTCCAGAAAGCATCAGAA 843
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ADL34671 standard; DNA; 20 BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  18-SEP-2003; 2003US-00667022.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                cytostatic; gene therapy; ds
                                                             18-SEP-2003; 2003US-00667022.
                                                                                                    31-MAY-2002; 2002US-00160786.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    17-JUN-2004 (first entry)
                                                                                                                                                                                                     Freier SM, Dobie KW;
                                                                                                                                                                                                                                         WPI; 2004-282523/26
                                                                                                                                           (FREI/) FREIER S M. (DOBI/) DOBIE K W.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 for gene therapy.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            JS2004063657-A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 01-APR-2004
                            01-APR-2004.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ADL34671;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     RESULT 187
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Homo
```

셤

%EX#X#X#X#X#X#X#####

```
This invention describes a novel antisense oligomucleotides which specifically hybridises to and inhibits the expression of human specifically hybridises to and inhibits the expression of human phosphoinositide-3-kinase, regulatory subunit 4, piso. The coligomucleotides comprises at least need internucleoside linkage, preferably a phosphorothicate linkage. It also comprises at least one modified sugar modety, preferably a 2'-O-methoxyethyl sugar modety. The modified sugar modety, preferably a 2'-O-methoxyethyl sugar modety. The modified sugar modety, preferably a 2'-O-methoxyethyl sugar modety. The modeobase, preferably a senethylcosine. The antisense oligonucleotide undeobase, preferably e.g. to prevent or delay infection, can be used in diagnostics and as research reagents and kits. It can also be used prophylactically, e.g. to prevent or delay infection, condition associated with phosphoinositide-3-kinase, regulatory subunit 4, piso, e.g. hyperproliferative disorder, preferably cancer, chediak-Higashi syndrome or a metabolic disorder. The products of the invention are immunomodulators with cytostatic activity and can be used
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             antisense; inhibitor; hybridisation; human; phosphoinositide-3-kinase; regulatory subunit 4; p150; internucleoside linkage; phosphorothioate linkage; 2'-0-methoxyethyl sugar; 5-methylcytosine; infection; inflammation; tumour formation; hyperproliferative disorder; cancer; Chediak-Higashi syndrome; metabolic disorder; immunomodulator; cytostatic; gene therapy; ds.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Phosphoinositide-3-kinase regulatory subunit 4 p150 fragment 124668.
                                                                                                                                                                                                                                                                                                          New antisense compound targeted to a nucleic acid molecule encoding phosphoinositide-3-kinase, regulatory subunit 4, p150, useful for treating cancer, Chediak-Higashi syndrome or a metabolic disorder.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  0.4%; Score 20; DB 1; Length 20; 100.0%; Pred. No. 1.4e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Sequence 20 BP; 5 A; 3 C; 5 G; 7 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                100.0%; Pred. ...
                                                                                                                                                                                                                                                                                                                                                                                                                                                             Example 15; SEQ ID NO 117; 60pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         2524 GITTACGAATITGCCAGTGA 2543
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1 GTTTACGAATTTGCCAGTGA 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ADL34699 standard; DNA; 20 BP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       18-SEP-2003; 2003US-00667022.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    31-MAY-2002; 2002US-00160786.
31-MAY-2002; 2002US-00160786
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   17-JUN-2004 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Local Similarity 100.
hes 20; Conservative
                                                                                                                                                                             Freier SM, Dobie KW;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            (FREI/) FREIER S M. (DOBI/) DOBIE K W.
                                                                                                                                                                                                                                                     WPI; 2004-282523/26.
                                                                (FREI/) FREIER S M. (DOBI/) DOBIE K W.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                US2004063657-A1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      for gene therapy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   01-APR-2004.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ADL34699;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              RESULT 188
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ADL34699
```

```
20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ADL34598;
                                                                                                                                                                                                                                                                                                                                                                                  Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  RESULT 190
                                                                                                                                                                                                                                                                                                                                                                                                         Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ADL34598
 셤
                                                                                                                                                                                                                                                                                                                                                                                                                                     8
                                                                                                                     This invention describes a novel antisense oligonucleotides which specifically hybridises to and inhibits the expression of human phosphoriositide-3-kinase, regulatory subunit 4, piso. The phosphoriositide-3-kinase at least one modified internucleoside linkage, preferably a phosphorothioate linkage. It also comprises at least one modified sugar molety, preferably a 2-O-methoxyethyl sugar molety. The antisense oligonucleotide further comprises at least one modified nucleobase, preferably a 5-methylcytosine. The antisense oligonucleotide can be used in diagnostics and as research reagents and kits. It can also be used prophylactically, e.g. to prevent or delay infection, inflammation or tumour formation. It can also be used to treat a disease or condition associated with phosphoinositide-3-kinase, regulatory cubunit 4, piso, e.g. hyperproliferative disorder, preferably cancer, chediak-Higashi syndrome or a metabolic disorder. The products of the invention are immunomodulators with cytostatic activity and can be used
                                                                                                                                                                                                                                                                                                                                                                                                ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                antisense; inhibitor; hybridisation; human; phosphoinositide-3-kinase; regulatory subunit 4; p150; internucleoside linkage; phosphorothioate linkage; "-O-methoxyethyl sugar; 5-methylcytosine; infection; inflammation; tumour formation; hyperproliferative disorder;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      infection; inflammation; tumour formation; hyperprollerative ulboluda
cancer; Chediak-Higashi syndrome; metabolic disorder; immunomodulator;
                                                                                                                                                                                                                                                                                                                                                                                                Gaps
                                                New antisense compound targeted to a nucleic acid molecule encoding phosphoinositide-3-kinase, regulatory subunit 4, p150, useful for treating cancer, Chediak-Higashi syndrome or a metabolic disorder.
                                                                                                                                                                                                                                                                                                                                                                                                ö
                                                                                                                                                                                                                                                                                                                                                                   . Match 0.4%; Score 20; DB 1; Length 20; Local Similarity 100.0%; Pred. No. 1.4e+02; les 20; Conservative 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  /note= "phosphorothioate backbone"
                                                                                                                                                                                                                                                                                                                                             Sequence 20 BP; 9 A; 6 C; 2 G; 3 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ISIS antisense oligonucleotide ISIS 206968.
                                                                                                Example 15; SEQ ID NO 145; 60pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                cytostatic; gene therapy; ss; primer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                        4776 CTGACTAAATGACACCCAAA 4795
                                                                                                                                                                                                                                                                                                                                                                                                                                                1 creacraaargacacccaaa 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      /mod base= OTHER
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ADL34576 standard; DNA; 20 BP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              18-SEP-2003; 2003US-00667022
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    31-MAY-2002; 2002US-00160786
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             . .20
*tag=
 Dobie KW;
                         WPI; 2004-282523/26.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            (FREI/) FREIER S M. (DOBI/) DOBIE K W.
                                                                                                                                                                                                                                                                                                                     for gene therapy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           US2004063657-A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Key
modified_base
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                17-JUN-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     01-APR-2004.
Freier SM,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Synthetic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ADL34576;
                                                                                                                                                                                                                                                                                                                                                                      Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      RESULT 189
                                                                                                                                                                                                                                                                                                                                                                                                Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 셤
                                                                                                                                                                                                                                                                                                                                                                                                                         ઠે
```

```
This invention describes a novel antisense oligonucleotides which specifically hybridises to and inhibits the expression of human phosphoinositude-3-kinase, regulatory subunit 4, p150. The oligonucleotides comprises at least one modified internucleoside linkage. Comprises at least one modified internucleoside linkage. It also comprises at least one modified sugar molety, preferably a 2'-O-methoxyethyl sugar molety. The antisense oligonucleotide further comprises at least one modified nucleobase, preferably a 5-methylcytosine. The antisense oligonucleotide further comprises at least one modified nucleobase, preferably a 5-methylcytosine. The antisense oligonucleotide can be used prophylactically, e.g. to prevent or delay infection, inflammation or tumour formation. It can also be used to treat a disease or condition associated with phosphoinositide-3-kinase, regulatory combunit 4, p150, e.g. hyperproliferative disorder, preferably cancer, chediak-Higashi syndrome or a metabolic disorder. The products of the invention are immunomodulators with cytostatic activity and can be used
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     antisense; inhibitor; hybridisation; human; phosphoinositide-3-kinase; regulatory subunit 4; p150; internucleoside linkage; phosphorchioare linkage; 2'-O-methoxyethyl sugar; 5-methylcytosine; infection; inflammation; tumour formation; hyperproliferative disorder; cancer; Chediak-Higashi syndrome; metabolic disorder; immunomodulator;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Gape
                                                                                                                                                   New antisense compound targeted to a nucleic acid molecule encoding phosphoinositide-3-kinase, regulatory subunit 4, p150, useful for treating cancer, Chediak-Higashi syndrome or a metabolic disorder.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   / Match 0.4%; Score 20; DB 1; Length 20; Local Similarity 100.0%; Pred. No. 1.4e+02; nes 20; Conservative 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  /mod_base= OTHER
/note= "phosphorothioate backbone"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Sequence 20 BP; 4 A; 3 C; 5 G; B T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ISIS antisense oligonucleotide ISIS 206990.
                                                                                                                                                                                                                                                                                                                           Example 15; SEQ ID NO 22; 60pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             cytostatic; gene therapy; ss; primer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                824 CTTTCCAGAAGCATCAGAA 843
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CTTTCCAGAAAGCATCAGAA 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ADL34598 standard; DNA; 20 BP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    18-SEP-2003; 2003US-00667022.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 31-MAY-2002; 2002US-00160786
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 17-JUN-2004 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               *tag= a
Dobie KW;
                                                                             WPI; 2004-282523/26.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    (FREI/) FREIER S M.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               for gene therapy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        US2004063657-A1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Key
modified_base
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 01-APR-2004
Freier SM,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Synthetic
```

```
This invention describes a novel antisense oligonucleotides which specifically hybridises to and inhibits the expression of human phosphoinositide-3-kinase, regulatory subunit 4, piso. The phosphoinositide comprises at least one modified internucleoside linkage, oligonucleotides comprises at least one modified supar mojety, preferably a 2'-O-methoxyethy! sugar mojety. The antisense oligonucleotide further comprises at least one modified supar mojety, preferably a 2'-O-methoxyethy! sugar mojety. The confice of a least one modified incleobase, preferably a sensorial reast one modified can be used in diagnostics and as research reagents and kits. It can also be used prophylactically, e.g. to prevent or delay infection, condition associated with phosphoinositide-3-kinase, regulatory subunit 4, piso, e.g. hyperproliferative disorder, preferably accertically and can be used invention are immunomodulators with cytostatic activity and can be used invention are immunomodulators with cytostatic activity and can be used
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               antisense; inhibitor; hybridisation; human; phosphoinositide-3-kinase; regulatory subunit 4; p150; internucleoside linkage; phosphorothioate linkage; 2'-O-methoxyethyl sugar; 5-methylcytosine; infection; inflammation; tumour formation; hyperproliferative disorder; cancer; Chedlak-Higashi syndrome; metabolic disorder; immunomodulator; cytostatic; gene therapy; ss; primer.
                                                                                                                                                      New antisense compound targeted to a nucleic acid molecule encoding phosphoinositide-3-kinase, regulatory subunit 4, p150, useful for treating cancer, Chediak-Higashi syndrome or a metabolic disorder.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       0.4%; Score 20; DB 1; Length 20; 100.0%; Pred. No. 1.40+02; ive 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              /note= "phosphorothioate backbone"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Sequence 20 BP; 3 A; 5 C; 9 G; 3 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ISIS antisense oligonucleotide ISIS 207006.
                                                                                                                                                                                                                                                               Example 15; SEQ ID NO 53; 60pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             2843 GCCCTCCGCCAGAGGATCCT 2862
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          mod base= OTHER
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       GCCTCCGCCAGAGGATCCT 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ВР
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             18-SEP-2003; 2003US-00667022.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           31-MAY-2002; 2002US-00160786
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ADL34614 standard; DNA; 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ...20
/*tag= a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  17-JUN-2004 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Query Match
Best Local Similarity 100.
                                                                       Freier SM, Dobie KW;
                                                                                                                        WPI; 2004-282523/26
(FREI/) FREIER S M. (DOBI/) DOBIE K W.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   for gene therapy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 US2004063657-A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Key
modified_base
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  01-APR-2004.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Synthetic.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ADL34614;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           RESULT 192
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ADL34614/
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           g
          8
                                                                                                                                                                                                                                                                                      This invention describes a novel antisense oligonucleotides which specifically hybridises to and inhibits the expression of human phosphoinositide—3 kinase, regulatory subunit 4, p150. The phosphoinositide—3 kinase, regulatory subunit 4, p150. The coligonucleotides comprises at least tone modified internucleoside linkage, preferably a phosphorothioate linkage. It also comprises at least one modified sugar moiety, preferably a 2.0-methoxyethyl sugar moiety. The modified sugar moiety, preferably a 2.0-methoxyethyl sugar moiety. The nucleobase, preferably a 5-methylycosine. The antisense oligonucleotide can bused in diagnostics and as research reagents and kits. It can also be used prophylactically, e.g. to prevent or delay infection, inflammation or tumour formation. It can also be used to treat a disease or condition associated with phosphoinositide—3-kinase, regulatory condition associated with phosphoinositide—3-kinase, regulatory can bund the submit 4, p150, e.g. hyperproliferative disorder. The products of the convert of a metabolic disorder. The products of the invention are immunomodulators with cytostatic activity and can be used
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            antisense; inhibitor; hybridisation; human; phosphoinositide-3-kinase; regulatory subunit 4; p150; internucleoside linkage; phosphorochioare linkage; 2'-O-methoxyethyl sugar; 5-methylcytosine; infection; inflammation; tumour formation; hyperproliferative disorder; cancer; Chediak-Higashi syndrome; metabolic disorder; immunomodulator;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   0; Gaps
                                                                                                                                                 New antisense compound targeted to a nucleic acid molecule encoding phosphoinositide-3-kinase, regulatory subunit 4, p150, useful for treating cancer, Chediak-Higashi syndrome or a metabolic disorder.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                0.4%; Score 20; DB 1; Length 20;
100.0%; Pred. No. 1.4e+02;
tive 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    /note= "phosphorothioate backbone"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Sequence 20 BP; 5 A; 5 C; 5 G; 5 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ISIS antisense oligonucleotide ISIS 206999.
                                                                                                                                                                                                                                                          Example 15; SEQ ID NO 44; 60pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               cytostatic; gene therapy; ss; primer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      2041 ACAGCTCTGAGATTCCTGGA 2060
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     OTHER
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          20 ACAGCTCTGAGATTCCTGGA 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ADL34607 standard; DNA; 20 BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 18-SEP-2003; 2003US-00667022.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      31-MAY-2002; 2002US-00160786.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                /mod_base=
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           /*tag= a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Query Match 0.4
Best Local Similarity 100.
Matches 20; Conservative
                                                               Freier SM, Dobie KW;
                                                                                                           WPI; 2004-282523/26
                 (DOBI/) DOBIE K W.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              for gene therapy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               US2004063657-A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Key
modified_base
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          01-APR-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             17-JUN-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Synthetic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ADL34607;
```

셤

ò

ADL34607/c
ID ADL34607/c
XX ADL346
X

ö

Gaps

```
셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ઠે
                                                                                                                                                                        This invention describes a novel antisense oligonucleotides which specifically hybridises to and inhibits the expression of human phosphoinositide-3-kinase, regulatory subunit 4, pi50. The oligonucleotides comprises at least one modified internucleoside linkage, preferably a phosphorothioate linkage. It also comprises at least one moistfad sugar molety, preferably a 2-0-methoxyethyl sugar molety. The antisense oligonucleotide further comprises at least one modified nucleobase, preferably a 5-methylcytosine. The antisense oligonucleotide further comprises at least one modified nucleobase, preferably a 5-methylcytosine. The antisense oligonucleotide can be used in diagnostics and as research reagents and kits. It can also be used prophylactically, e.g. to prevent or delay infection, inflammation or tumour formation. It can also be used to treat a disease or condition associated with phosphoinositide-3-kinase, regulatory chediak-Higashi syndrome or a metabolic disorder, preferably cancer, chediak-Higashi syndrome or a metabolic disorder. The products of the invention are immunomodulators with cytostatic activity and can be used
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  antisense; inhibitor; hybridisation; human; phosphoinositide-3-kinase; regulatory subunit 4; p150; internucleoside linkage; p150; phosphorothioate linkage; 2'-0-methoxyethyl sugar; 5-methylcytosine; infection; inflammation; tumour formation; hyperproliferative disorder; cancer; Chediak Higashi syndrome; metabolic disorder; immunomodulator; cytostatic; gene therapy; ss; primer.
                                                                                                                                                                                                                                                                                                                                                                                                                                                   0; Gaps
                                                                                                  New antisense compound targeted to a nucleic acid molecule encoding phosphoinositide-3-kinase, regulatory subunit 4, p150, useful for treating cancer, Chediak-Higashi syndrome or a metabolic disorder.
                                                                                                                                                                                                                                                                                                                                                                                                                       0.4%; Score 20; DB 1; Length 20; 100.0%; Pred. No. 1.46+02; tive 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      /note= "phosphorothioate backbone"
                                                                                                                                                                                                                                                                                                                                                                                                 Sequence 20 BP; 6 A; 2 C; 6 G; 6 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ISIS antisense oligonucleotide ISIS 207008.
                                                                                                                                                   Example 15; SEQ ID NO 60; 60pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           3341 GIAGIACAAICTIACCAICC 3360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          /mod_base= OTHER
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        GTAGTACAATCTTACCATCC 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ADL34616 standard; DNA; 20 BP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   18-SEP-2003; 2003US-00667022.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ...20
*tag= a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                20; Conservative
                                                  Freier SM, Dobie KW;
                                                                          WPI; 2004-282523/26.
           FREIER S M.
                                                                                                                                                                                                                                                                                                                                                                                                                                      Local Similarity
                         DOBIE K W.
                                                                                                                                                                                                                                                                                                                                                                         for gene therapy.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 US2004063657-A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Key
modified_base
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    17-JUN-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        01-APR-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Synthetic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ADL34616;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   20
                                                                                                                                                                                                                                                                                                                                                                                                                        Query Match
           (FREI/)
                         (DOBI/)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Best Loc
Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                셤
ઠે
```

```
This invention describes a novel antisense oligonucleotides which specifically hybridises to and inhibits the expression of human phosphoriositide-3-kinase, regulatory subunit 4, p150. The oligonucleotides comprises at least one modified internucleoside linkage. Comprises at least one modified internucleoside linkage. It also comprises at least one modified antisense oligonucleotide further comprises at least one modified uncleobase, preferably a 5-methylcytosine. The antisense oligonucleotide further comprises at least one modified nucleobase, preferably a 5-methylcytosine. The antisense oligonucleotide can be used prophylactically, e.g. to prevent or delay infection, inflammation or tumour formation. It can also be used prophylactically, e.g. to prevent or delay infection, inflammation or tumour formation. It can also be used to treat a disease or condition associated with phosphoinositide-3-kinase, regulatory cubunit 4, p150, e.g. hyperproliferative disorder, preferably cancer, chediak-Higashi syndrome or a metabolic disorder. The products of the invention are immunomodulators with cytostatic activity and can be used
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           antisense; inhibitor; hybridisation; human; phosphoinositide-3-kinase; regulatory subunit 4; pi50; internucleoside linkage; phosphorothioate linkage; 2'-O-methoxystehyl sugar; 5-methylcytosine; infection; inflammation; tumour formation; hyperproliferative disorder; cancer; Chediak-Higashi syndrome; metabolic disorder; immunomodulator;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Gaps
                                                                                                                                                                                                                                                                                                                             New antisense compound targeted to a nucleic acid molecule encoding phosphoinositide-3-kinase, regulatory subunit 4, p150, useful for treating cancer, Chediak-Higashi syndrome or a metabolic disorder.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             0.4%; Score 20; DB 1; Length 20;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             /mod_base= OTHER
/note= "phosphorothioate backbone"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Sequence 20 BP; 4 A; 6 C; 3 G; 7 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1.4e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ISIS antisense oligonucleotide ISIS 207030.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                100.0%; Pred. No. 1.4 tive 0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Example 15; SEQ ID NO 62; 60pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     cytostatic, gene therapy; ss; primer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            3431 GCAATGCTGAGAGAATAGCT 3450
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           GCAATGCTGAGAGAATAGCT 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ADL34630 standard; DNA; 20 BP
31-MAY-2002; 2002US-00160786.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 18-SEP-2003; 2003US-00667022.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      *tag= a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           17-JUN-2004 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Best Local Similarity 100.
Matches 20; Conservative
                                                                                                                                                                                  Dobie KW;
                                                                                                                                                                                                                                                            WPI; 2004-282523/26.
                                                                 (FREI/) FREIER S M. (DOBI/) DOBIE K W.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  US2004063657-A1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Key
modified_base
                                                                                                                                                                                  Freier SM,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           01-APR-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Synthetic.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ADL34630;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  RESULT 194
ADL34630/c
```

```
31-MAY-2002; 2002US-00160786.
18-SEP-2003; 2003US-00667022.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        (FREI/) FREIER S M.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              01-APR-2004.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ADL34649;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          RESULT 196
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ADL34649
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Š
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ö
                                                                                                                                                                                                                                                                                                This invention describes a novel antisense oligonuclectides which specifically hybridises to and inhibits the expression of human phosphonositide-3-kinase, regulatory subunit 4, pl50. The solution of human phosphonositides comprises at least one modified internucleoside linkage, preferably a phosphorothioate linkage. It also comprises at least one modified sugar moiety, preferably a 2-0-methoxysthyl sugar moiety. The antisense oligonucleotide further comprises at least one modified nucleobase, preferably 5-methylcytosine. The antisense oligonucleotide can be used in diagnostics and as research reagents and kits. It can also be used prophylactically, e.g. to prevent or delay infection, inflammation or tumour formation. It can also be used to treat a disease or condition associated with phosphoinositide-3-kinase, regulatory
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       antisense; inhibitor; hybridisation; human; phosphoinositide-3-kinase; regulatory subunit 4; p150; internucleoside linkage; phosphorothioate linkage; 2'-0-methoxyethyl sugar; 5-methylcytosine; infection; inflammation; twonur formation; hyperproliferative disorder; cancer; Chediak-Higashi syndrome; metabolic disorder; immunomodulator; cytostatic; gene therapy; ss; primer.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          subunit 4, p150, e.g. hyperproliferative disorder, preferably cancer, Chediak-Higashi syndrome or a metabolic disorder. The products of the invention are immunomodulators with cytostatic activity and can be used for gene therapy.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Gaps
                                                                                                                                                                                             targeted to a nucleic acid molecule encoding
                                                                                                                                                                                               New antisense compound targeted to a nucleic acid molecule encodin
phosphoinositide-3-kinase, regulatory subunit 4, p150, useful for
treating cancer, Chediak-Higashi syndrome or a metabolic disorder.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Query Match 0.4%; Score 20; DB 1; Length 20; Best Local Similarity 100.0%; Pred. No. 1.4e+02; Matches 20; Conservative 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       /note= "phosphorothioate backbone"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Sequence 20 BP; 3 A; 8 C; 2 G; 7 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ISIS antisense oligonucleotide ISIS 207040.
                                                                                                                                                                                                                                                                         Example 15; SEQ ID NO 76; 60pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      4212 GGAGACTGGTGACAGAAGAT 4231
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      /mod_base= OTHER
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           20 GGAGACTGGTGACAGAAGAT 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     BP.
                                31-MAY-2002; 2002US-00160786.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1..20
/*tag= a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ADL34640 standard; DNA; 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             17-JUN-2004 (first entry)
                                                                                                                           Freier SM, Dobie KW;
                                                                                                                                                              WPI; 2004-282523/26.
                                                                     (FREI/) FREIER S M. (DOBI/) DOBIE K W.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                US2004063657-A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Key
modified base
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  01-APR-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Synthetic.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ADL34640;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   RESULT 195
```

g

ઠે

```
This invention describes a novel antisense oligonucleotides which specifically hybridises to and inhibits the expression of human specifically hybridises to and inhibits the expression of human collypound of the specifically hybridises to and inhibits the expression of human collypound of the set one modified internucleoside linkage. The preferably a phosphorothioate linkage. It also comprises at least one modified sugar molety, preferably a 2'-O-methoxyethyl sugar molety. The antisense oligonucleotide further comprises at least one modified antisense oligonucleotide further comprises at least one modified can be used in diagnostics and as research reagents and kits. It can also be used prophylactically, e.g. to prevent or delay infection, can be used prophylactically, e.g. to prevent or delay infection, condition associated with phosphoinositide-3-kinase, regulatory subunit 4, p150, e.g. hyperproliferative disorder, preferably cancer, chediak Higashi syndrome or a metabolic disorder. The products of the
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        antisense; inhibitor; hybridisation; human; phosphoinositide-3-kinase; regulatory subunit 4; p150; internucleoside linkage; phosphorothioate linkage; 2'-O-methoxyethyl sugar; 5-methylcytosine; infection; inflammation; tumour formation; hyperproliferative disorder; cancer; Chediak-Higashi syndrome; metabolic disorder; immunomodulator;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          invention are immunomodulators with cytostatic activity and can be used
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Phosphoinositide-3-kinase regulatory subunit 4 p150 fragment 124601.
                                                                                                                                                                                                                                                New antisense compound targeted to a nucleic acid molecule encoding phosphoinositide-5-kinase, regulatory subunit 4, pls0, useful for treating cancer, Chediak-Higashi syndrome or a metabolic disorder.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  0.4%; Score 20; DB 1; Length 20; 00.0%; Pred. No. 1.4e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Sequence 20 BP; 3 A; 2 C; 6 G; 9 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              100.0%; Pred. ...
                                                                                                                                                                                                                                                                                                                                                                                                                    Example 15; SEQ ID NO 86; 60pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  4776 CIGACIAAAIGACACCCAAA 4795
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               20 CTGACTAAATGACACCCAAA 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         18-SEP-2003; 2003US-00667022,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 31-MAY-2002; 2002US-00160786.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    cytostatic; gene therapy; ds
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ADL34649 standard; DNA; 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       17-JUN-2004 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Conservative
                                                                                                                Freier SM, Dobie KW,
                                                                                                                                                                                            WPI; 2004-282523/26
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Query Match
Best Local Similarity
Matches 20; Conserv
(FREI/) FREIER S M. (DOBI/) DOBIE K W.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  for gene therapy.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            US2004063657-A1.
```

```
This invention describes a novel antisense oligonucleotides which specifically hybridises to and inhibits the expression of human phosphoinositide-3-kinase, regulatory subunit 4, piso. The oligonucleotides comprises at least one modified internucleoside linkage, preferably a phosphorothioate linkage. It also comprises at least one modified sugar moiety, preferably a 2.-O-methoxyethyl sugar moiety. The antisense oligonucleotide further comprises at least one modified nucleobase, preferably a 5-methylcytosine. The antisense oligonucleotide can be used in diagnostics and as research reagents and kits. It can also be used prophylactically, e.g. to prevent or delay infection, inflammation or tumour formation. It can also be used to treat a disease or condition associated with phosphoinositide-3-kinase, regulatory subunit 4, piso, e.g. hyperproliferative disorder, preferably cancer, chediak-Higashi syndrome or a metabolic disorder. The products of the
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    antisense; inhibitor; hybridisation; human; phosphoinositide-3-kinase; regulatory subunit 4; p150; internucleoside linkage; phosphorothicate linkage; 2'-0-methoxyethyl sugar; 5-methylcytosine; infection; inflammation; tumour formation; hyperproliferative disorder; cancer; Chediak-Higashi syndrome; metabolic disorder; immunomodulator; cytostatic; gene therapy; ds.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        nvention are immunomodulators with cytostatic activity and can be used
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Phosphoinositide-3-kinase regulatory subunit 4 p150 fragment 124629.
                                                                                                          New antisense compound targeted to a nucleic acid molecule encoding
                                                                                                                         phosphoinositide-3-kinase, regulatory subunit 4, p150, useful for treating cancer, Chediak-Higashi syndrome or a metabolic disorder.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Score 20; DB 1; Length 20;
Pred. No. 1.4e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Sequence 20 BP; 3 A; 4 C; 8 G; 5 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 0.4%; Scor.
100.0%; Pred. No. 1...
... 0; Mismatches
                                                                                                                                                                              Example 15; SEQ ID NO 95; 60pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   703 CGAGAAGGCCTGGTCGTTGT 722
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ceaeaaeeccreercerrer 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ADL34669 standard; DNA; 20 BP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                18-SEP-2003; 2003US-00667022
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   31-MAY-2002; 2002US-00160786
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Best Local Similaricy
                                   Freier SM, Dobie KW;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Freier SM, Dobie KW;
                                                                     MPI; 2004-282523/26.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           WPI; 2004-282523/26.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 (FREI/) FREIER S M.
(DOBI/) DOBIE K W.
(DOBI/) DOBIE K W.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       for gene therapy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        JS2004063657-A1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    17-JUN-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            01-APR-2004.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ADL34669;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          RESULT 197
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ADL34669
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ò
```

```
This invention describes a novel antisense oligonucleotides which specifically hybridises to and inhibits the expression of human phosphoinositide-3-kinase, regulatory subunit 4, piso. The phosphoinositide-3-kinase at least one modified internucleoside linkage, preferably a phosphorothioate linkage. It also comprises at least one modified sugar molety, preferably a 2'-O-methoxyethyl sugar molety. The antisense oligonucleotide further comprises at least one modified nucleobase, preferably a 5-methylcytosine. The antisense oligonucleotide further comprises at least one modified nucleobase, preferably a 5-methylcytosine. The antisense oligonucleotide can be used prophylactically, e.g. to prevent or delay infection, inflammation or tumour formation. It can also be used to treat a disease or condition associated with phosphoinositide-3-kinase, regulatory companied by syndrome or a metabolic disorder, preferably cancer, chediak-Higashi syndrome or a metabolic disorder. The products of the invention are immunomodulators with cytostatic activity and can be used
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         antisense; inhibitor; hybridisation; human; phosphoinositide-3-kinase; regulatory subunit 4; pl50; internucleoside linkage; phosphorothioate linkage; 2'-O-methoxystehyl sugar; 5-methylcytosine; infection; inflammation; tumour formation; hyperproliferative disorder; cancer; Chediak-Higashi syndrome; metabolic disorder; immunomodulator;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Gape
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Phosphoinositide-3-kinase regulatory subunit 4 p150 fragment 124648.
                  New antisense compound targeted to a nucleic acid molecule encoding phosphoinositide-3-kinase, regulatory subunit 4, p150, useful for treating cancer, Chediak-Higashi syndrome or a metabolic disorder.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         New antisense compound targeted to a nucleic acid molecule encoding phosphoinositide-3-kinase, regulatory subunit 4, p150, useful for treating cancer, Chediak-Higashi syndrome or a metabolic disorder.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                0.4%; Score 20; DB 1; Length 20; 100.0%; Pred. No. 1.4e+02; tive 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Sequence 20 BP; 5 A; 6 C; 5 G; 4 T; 0 U; 0 Other;
                                                                                              Example 15; SEQ ID NO 115; 60pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              2391 TGGCTGCCAAAGCTCCTCAA 2410
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   recerecanacerecten 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    BP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        18-SEP-2003; 2003US-00667022.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              cytostatic; gene therapy; ds.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               31-MAY-2002; 2002US-00160786.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ADL34687 standard; DNA; 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Query Match
Best Local Similarity 100.0
--- hes 20; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                17-JUN-2004 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Dobie KW;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    WPI; 2004-282523/26.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    FREIER S M.
DOBIE K W.
                                                                                                                                                                                                                                                                                                                                                                                                                                    for gene therapy.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          US2004063657-A1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 01-APR-2004.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Freier SM,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ADL34687;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   -
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      FREI/)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          (DOBI/)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 RESULT 198
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ADL34687
ઠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 셤
```

```
Key
modified_base
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            01-APR-2004.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Freier SM,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Synthetic.
                                                                                                                                                                                                                                                                                                                                                                                                                             ADL34593;
                                                                                                                                                                                                                                                                                                                                         20
                                                                                                                                                                                                                                                                  Query Match
                                                                                                                                                                                                                                                                                Best Loca
Matches
                                                                                                                                                                                                                                                                                                                                                                              RESULT 200
                                                                                                                                                                                                                                                                                                                                                                                           ADL34593
                                                                                                                                                                                                                                                                                                                                                                                                                 ð
                                                                                                                                                                                                                                                                                                                                        g
                  This invention describes a novel antisense oligonucleotides which specifically hybridises to and inhibits the expression of human phosphoinositide—3 kinase, regulatory subunit 4, p150. The phosphoinositide—3 kinase, regulatory subunit 4, p150. The coligonucleotides comprises at least one modified internucleoside linkage, preferably a 2'-0 methoxyethyl sugar molety. The modified sugar molety, preferably a 2'-0 methoxyethyl sugar molety. The modified sugar molety, preferably a 2'-0 methoxyethyl sugar molety. The nucleobase, preferably a 5-methylcycosine. The antisense oligonucleotide used used in diagnostics and as research reagents and kits. It can also be used prophylactically, e.g. to prevent or delay infection, infammation or tumour formation. It can also be used to treat a disease or condition associated with phosphoinositide—3-kinase, regulatory subunit 4, p150, e.g. hyperpoliferative disorder, preferably cancer, chediak-Higashi syndrome or a metabolic disorder. The products of the invention are immunomodulators with cytostatic activity and can be used
                                                                                                                                                                                                                                                                                ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      antisense; inhibitor; hybridisation; human; phosphoinositide-3-kinase; regulatory subunit 4; p150; internucleoside linkage; phosphorothioate linkage; 2'-O-methoxyethyl sugar; 5-methylcytosine; infection; inflammation; tumour formation; hyperproliferative disorder; cancer; Chediak-Higashi syndrome; metabolic disorder; immunomodulator;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           New antisense compound targeted to a nucleic acid molecule encoding phosphoinositide-3-kinase, regulatory subunit 4, p150, useful for treating cancer, Chediak-Higashi syndrome or a metabolic disorder.
                                                                                                                                                                                                                                                                                   Gaps
                                                                                                                                                                                                                                                                                   ö
                                                                                                                                                                                                                                                        0.4%; Score 20; DB 1; Length 20;
100.0%; Pred. No. 1.4e+02;
ive 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             /mod_base= OTHER
/note= "phosphorothioate backbone"
                                                                                                                                                                                                                                  Sequence 20 BP; 6 A; 3 C; 5 G; 6 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ISIS antisense oligonucleotide ISIS 206963.
   Example 15; SEQ ID NO 133; 60pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         cytostatic; gene therapy; ss; primer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Location/Qualifiers
                                                                                                                                                                                                                                                                                                           3555 GAATCGAATTAGAGTCTCTG 3574
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         base= OTHER
                                                                                                                                                                                                                                                                                                                            1 GAATCGAATTAGAGTCTCTG 20
                                                                                                                                                                                                                                                                                                                                                                                      ADL34571/c
ID ADL34571 standard; DNA; 20 BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             18-SEP-2003; 2003US-00667022
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     31-MAY-2002; 2002US-00160786
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ø
                                                                                                                                                                                                                                                                                                                                                                                                                                               (first entry)
                                                                                                                                                                                                                                                                                     20; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1. .20
/*tag=
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Dobie KW;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          WPI; 2004-282523/26.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               (FREI/) FREIER S M.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         (DOBI/) DOBIE K W.
                                                                                                                                                                                                                                                                          Local Similarity
                                                                                                                                                                                                               for gene therapy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  US2004063657-A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Key
modified base
                                                                                                                                                                                                                                                                                                                                                                                                                                                17-JUN-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        01-APR-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Freier SM,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Synthetic.
                                                                                                                                                                                                                                                                                                                                                                                                                         ADL34571;
                                                                                                                                                                                                                                                            Query Match
                                                                                                                                                                                                                                                                                       Matches
                                                                                                                                                                                                                                                                                                                                                                                                   ð
                                                                                                                                                                                                                                                                                                                                     셤
```

```
This invention describes a novel antisense oligonucleotides which specifically hybridises to and inhibits the expression of human specifically hybridises to and inhibits the expression of human phosphoinositide-3-kinase, regulatory subunit 4, p150. The coligonucleotides comprises at least one modified internucleoside linkage, coligonucleotides modety, preferably a 2'-O-methoxyethyl sugar moiety. The modified sugar moiety, preferably a 2'-O-methoxyethyl sugar moiety. The modified sugar moiety, preferably a 2'-O-methoxyethyl sugar moiety. The modified sugar moiety is a treast one modified coligonucleotide coligonucleotide incleobase, preferably a S-methylcytosine. The antisense oligonucleotide can be used in diagnostics and as research reagents and kits. It can also be used in diagnostics and as research reagents and kits. It can also be used to treat a disease inflammation or tumour formation. It can also be used to treat a disease or condition associated with phosphoinositide-3-kinase, regulatory subunit 4, p150, e.g. hyperproliferative disorder, preferably cancer, chediak-Higashi syndrome or a metablolic disorder. The products of the invention are immunomodulators with cytostatic activity and can be used
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                antisense; inhibitor; hybridisation; human; phosphoinositide-3-kinase; regulatory subunit 4; p150; internucleoside linkage; phosphorothiote linkage; 2'-O-methoxyethy1 sugar; 5-methylcytosine; infection; inflammation; tumour formation; hyperproliferative disorder; cancer; Chediak-Higashi syndrome; metabolic disorder; immunomodulator; cytostatic; gene therapy; ss; primer.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                New antisense compound targeted to a nucleic acid molecule encoding phosphoinositide-3-kinase, regulatory subunit 4, p150, useful for
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   0.4%; Score 20; DB 1; Length 20; 100.0%; Pred. No. 1.4e+02; ative 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          /note= "phosphorothioate backbone"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Sequence 20 BP; 6 A; 4 C; 4 G; 6 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ISIS antisense oligonucleotide ISIS 206985.
Example 15; SEQ ID NO 17; 60pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             559 CTTGCCATTATGGGAAATCA 578
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                /*tag= a
/mod base= OTHER
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CTTGCCATTATGGGAAATCA 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         31-MAY-2002; 2002US-00160786.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ADL34593 standard; DNA; 20 BP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  18-SEP-2003; 2003US-00667022.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                17-JUN-2004 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Local Similarity 100.
ses 20; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      . .20
*tag=
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Dobie KW;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      WPI; 2004-282523/26.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        (FREI/) FREIER S M. (DOBI/) DOBIE K W.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   for gene therapy.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             US2004063657-A1.
```

```
Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        (DOBI/)
                                                                                                                                                                                                                                                                                                            Matches
                                                                                                                                                                                                                                                                                                                                                                                              RESULT 202
                                                                                                                                                                                                                                                                                                                                                                                                                     g
                                                                                                                                                                                                                                                                                                                                     8
                                          This invention describes a novel antisense oligonucleotides which specifically hybridises to and inhibits the expression of human phosphoinositide-3-kinase, regulatory subunit 4, p150. The oligonucleotide comprises at least one modified internucleoside linkage, preferably a phosphorothioate linkage. It also comprises at least one modified sugar molety, preferably a 2-0-methoxyethyl sugar molety. The antisense oligonucleotide further comprises at least one modified nucleobase, preferably a 5-methylcytosine. The antisense oligonucleotide further comprises at least one modified nucleobase, preferably a 5-methylcytosine. The antisense oligonucleotide on ucleobase, preferably e.g. to prevent or delay infection, inflammation or tumour formation. It can also be used to treat a disease or condition associated with phosphoinositide-3-kinase, regulatory cubunit 4, p150, e.g. hyperproliferative disorder, preferably cancer, chediak-Higashi syndrome or a metabolic disorder. The products of the invention are immunomodulators with cytostatic activity and can be used
                                                                                                                                                                                                                                                                                                  ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   antisense; inhibitor; hybridisation; human; phosphoinositide-3-kinase; regulatory subunit 4; p150; internucleoside linkage; phosphorothioate linkage; 2'-O-methoxyvil sugar; 5-methylcytosine; infettion; inflammation; tumour formation; hyperproliferative disorder;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     cancer; Chediak-Higashi syndrome; metabolic disorder; immunomodulator;
                                                                                                                                                                                                                                                                                                  Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    New antisense compound targeted to a nucleic acid molecule encoding
treating cancer, Chediak-Higashi syndrome or a metabolic disorder
                                                                                                                                                                                                                                                                                                  ö
                                                                                                                                                                                                                                                                       0.4%; Score 20; DB 1; Length 20;
100.0%; Pred. No. 1.4e+02;
iive 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             /note= "phosphorothioate backbone"
                                                                                                                                                                                                                                                   Sequence 20 BP; 5 A; 4 C; 5 G; 6 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ISIS antisense oligonucleotide ISIS 206989.
                      Example 15; SEQ ID NO 39; 60pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  cytostatic; gene therapy; ss; primer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Location/Qualifiers
                                                                                                                                                                                                                                                                                                                       1. .20
/*tag= a
/mod_base= OTHER
                                                                                                                                                                                                                                                                                                                                                                                                          BP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   18-SEP-2003; 2003US-00667022
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         31-MAY-2002; 2002US-00160786
                                                                                                                                                                                                                                                                                                                                                                                                        ADL34597 standard; DNA; 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                        (first entry)
                                                                                                                                                                                                                                                                                                 20; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Freier SM, Dobie KW;
                                                                                                                                                                                                                                                                        Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              4PI; 2004-282523/26.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               (FREI/) FREIER S M. (DOBI/) DOBIE K W.
                                                                                                                                                                                                                            for gene therapy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     US2004063657-A1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         modified_base
                                                                                                                                                                                                                                                                                                                                                                                                                                                       17-JUN-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            01-APR-2004.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Synthetic
                                                                                                                                                                                                                                                                                                                                                                                                                                ADL34597;
                                                                                                                                                                                                                                                                                                                                                                                    RESULT 201
                                                                                                                                                                                                                                                                                                  Matches
                                                                                                                                                                                                                                                                                                                                                                                            셤
                                                                                                                                                                                                                                                                                                                         ð
```

```
ö
                                                                                                                                                                         This invention describes a novel antisense oligonucleotides which specifically hybridises to and inhibits the expression of human phosphonositide-3-kinase, regulatory subunit 4, pi50. The oligonucleotides comprises at least one modified internucleoside linkage, preferably a phosphorothicate linkage. It also comprises at least one modified angar molety, preferably a 2'-O-methoxyethyl sugar molety. The antisense oligonucleotide further comprises at least one modified nucleobase, preferably a 5-methylcytosine. The antisense oligonucleotide further comprises at least one modified nucleobase, preferably a 5-methylcytosine. The antisense oligonucleotide further comprises at least one modified be used in diagnostics and as research research sties. It can also be used to tumour formation. It can also be used to treat a disease or condition associated with phosphoinositide-3-kinase, regulatory subunit 4, pi50, e.g. hyperproliferative disorder, preferably cancer, Chediak-Higashi syndrome or a metabolic disorder. The products of the
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         invention are immunomodulators with cytostatic activity and can be used
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   antisense; inhibitor; hybridisation; human; phosphoinositide-3-kinase; regulatory subunit 4; p150; internucleoside linkage; phosphorothioate linkage; 2'-O-methoxyethyl sugar; 5-methylcytosine; infection; inflammation; tumour formation; hyperproliferative disorder; cancer; Chediak-Higashi syndrome; metabolic disorder; immunomodulator; cytostatic; gene therapy; ss; primer.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Gaps
phosphoinositide-3-kinase, regulatory subunit 4, p150, useful for treating cancer, Chediak-Higashi syndrome or a metabolic disorder.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ô
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      0.4%; Score 20; DB 1; Length 20; 100.0%; Pred. No. 1.4e+02; tive 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       /note= "phosphorothioate backbone"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Sequence 20 BP; 5 A; 3 C; 5 G; 7 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ISIS antisense oligonucleotide ISIS 207005.
                                                                                                              Example 15; SEQ ID NO 43; 60pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Location/Qualifiers
1. .20
/*tag= a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   2005 CTAGCCTATGCTGAAACAT 2024
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        OTHER
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CTAGCCTATGCTGAAACAT 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ADL34613 standard; DNA; 20 BP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   31-MAY-2002; 2002US-00160786
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        18-SEP-2003; 2003US-00667022
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         17-JUN-2004 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         20; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        /mod base
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Dobie KW
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      VPI; 2004-282523/26
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             (FREI/) FREIER S M.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 DOBIE K W.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    for gene therapy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      US2004063657-A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Key
modified_base
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             01-APR-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Freier SM,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Synthetic.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ADL34613;
```

compound targeted to a nucleic acid molecule encoding

English.

Example 15; SEQ ID NO 67; 60pp;

```
31-MAY-2002; 2002US-00160786.
                                                                                                                                                                                             18-SEP-2003; 2003US-00667022
                                                                                                                                                                                                                  Freier SM, Dobie KW;
                                                                                                                                                                                                                         WPI; 2004-282523/26.
                                                                                                                                                                                                         (FREI/) FREIER S M. (DOBI/) DOBIE K W.
                                                                                                                                                                                 US2004063657-A1.
                                                                                                                                                               Key
modified_base
                                                                                                                        17-JUN-2004
                                                                                                                                                   cytostatic;
                                                                                                                                                         Synthetic
                                                                                                                  ADL34621;
                                                                                                      RESULT 203
ð
                                                                                             셤
```

```
This invention describes a novel antisense oligonucleotides which specifically hybridises to and inhibits the expression of human phosphoinositide-3-kinase, regulatory subunit 4, piso. The phosphoinositide-3-kinase, regulatory subunit 4, piso. The oligonucleotides comprises at least one modified internucleoside linkage. The modified sugar molety, preferrably a 2'-0-methoxyethyl sugar molety. The antisense oligonucleotide further comprises at least one modified antisense oligonucleotide further comprises at least one modified antisense oligonucleotide further comprises at least one molety. The antisense oligonucleotide further comprises at least one molety. The antisense oligonucleotide further comprises at least one molety. The antisense oligonucleotide further comprises at least one molety. The antisense oligonucleotide further comprises at least one molety. The antisense oligonucleotide further comprises at least one molety. The antisense oligonucleotide further comprises at least one molety. The used prophylactically e.g. to prevent or delay infection, a finantial associated with phosphoinositide-3-kinase, regulatory subunit 4, pls0, e.g. hyperproliferative disorder. The products of the invention are immunomodulators with cytostatic activity and can be used
                                                              New antisense compound targeted to a nucleic acid molecule encoding phosphoinositide-3-kinase, regulatory subunit 4, p150, useful for treating cancer, Chediak-Higashi syndrome or a metabolic disorder.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        for gene therapy.
                       ઠે
                                                                                                                                                                                                            This invention describes a novel antisense oligonucleotides which specifically hybridises to and inhibits the expression of human prophoionsitide-3-kinase, regulatory subunit 4, pi50. The oligonucleotides comprises at least one modified internucleoside linkage, preferably a phosphorothioate linkage. It also comprises at least one modified sugar molety, preferably a 2-0-methoxyethyl sugar moiety. The antisense oligonucleotide further comprises at least one modified nucleobase, preferably a 5-methylcytosine. The antisense oligonucleotide can be used in diagnosetics and as research reagents and kits. It can also be used prophylactically, e.g. to prevent or delay infection.

In flammation or tumour formation. It can also be used to treat a disease or condition associated with phosphoinositide-3-kinase, regulatory subunit 4, pi50, e.g. hyperproliferative disorder, preferably cancer, continum the antimunomedulators with cytostatic activity and can be used for the formation are immunomodulators with cytostatic activity and can be used
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Gaps
New antisense compound targeted to a nucleic acid molecule encodir
phosphoinositide-3-kinase, regulatory subunit 4, p150, useful for
treating cancer, Chediak-Higashi syndrome or a metabolic disorder.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              0.4%; Score 20; DB 1; Length 20;
100.0%; Pred. No. 1.4e+02;
ive 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Sequence 20 BP; 5 A; 3 C; 4 G; 8 T; 0 U; 0 Other;
                                                                                                                                                 Example 15; SEQ ID NO 59; 60pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               3318 AAAACCAGTAATACCGGTTT 3337
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   20 AAACCAGTAATACCGGTTT 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Query Match
Best Local Similarity 100.0
Matches 20, Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 for gene therapy
```

```
Sequence 20 BP; 9 A; 2 C; 5 G; 4 T; 0 U; 0 Other;
                           Score 20; DB 1; Le
Pred. No. 1.4e+02;
          Query Match 0.4%; Score 20; ub. Best Local Similarity 100.0%; Pred. No. 1.4
                                                                         3583 TCACTTTTGCAACATGTTC 3602
                                                                                         ADL34652 standard; DNA; 20 BP.
                                                                                                                                                                                                                                                                                                                                                                                                                             18-SEP-2003; 2003US-00667022.
                                                                                                                                                                                                                                                                                                                                                                                                                                                      31-MAY-2002; 2002US-00160786.
                                                                                                                                                                                                               17-JUN-2004 (first entry)
                                                                                                                                                                                                                                                                                                                                                                             US2004063657-A1.
                                                                                                                                                                                                                                                                                                                                                                                                     01-APR-2004.
                                                                                                 20
                                                                                                                                                                                       ADL34652;
                                                                                                                                     RESULT 204
                                                                                                                                                               셤
                                                                                                                                                                                                                                         antisense; inhibitor; hybridisation; human; phosphoinositide-3-kinase; regulatory subunit 4; p150; internucleoside linkage; enthylcytosine; phosphorothioate linkage; 2'-O-methoxyterhyl sugar; 5-methylcytosine; infection; inflammation; tumour formation; hyperproliferative disorder; cancer; Chediak-Higashi syndrome; metabolic disorder; immunomodulator;
                                                                                                                                                                                                                                                                                                                                                                                                            'note= "phosphorothioate backbone"
                                                                                                                                                                                                                    ISIS antisense oligonucleotide ISIS 207021.
                                                                                                                                                                                                                                                                                                           gene therapy; ss; primer
                                                                                                                                                                                                                                                                                                                                                           Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                       1. .20
/*tag= a
/mod_base= OTHER
                                                                                                                                            ADL34621 standard; DNA; 20 BP.
                                                                                                                                                                                              (first entry)
```

ö

Gaps

; 0

Length 20; 0; Indels

```
antisense; inhibitor; hybridisation; human; phosphoinositide-3-kinase; regulatory subunit 4; p150; internucleoside linkage; phosphorothioate linkage; 2'-0-methoxyethyl sugar; 5-methylcytosine; infection; inflammation; tumour formation; hyperproliferative disorder; cancer; Chediak-Higashi syndicome; metabolic disorder; immunomodulator; cytostatic; gene therapy; ds.
Phosphoinositide-3-kinase regulatory subunit 4 p150 fragment 124605.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    New antisense compound targeted to a nucleic acid molecule encoding phosphoinositide-3-kinase, regulatory subunit 4, p150, useful for treating cancer, Chediak-Higashi syndrome or a metabolic disorder.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Freier SM, Dobie KW;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             WPI; 2004-282523/26.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                (FREI/) FREIER S M. (DOBI/) DOBIE K W.
```

```
8×3000000000000×8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ઠ
                                            This invention describes a novel antisense oligonucleotides which specifically hybridises to and inhibits the expression of human phosphoinositided-3 kinase, regulatory subunit 4, p150. The coligonucleotides comprises at least one modified internucleoside linkage, preferably a phosphorothioate linkage. It also comprises at least one modified sugar moiety, preferably a 2-0-methoxyethyl sugar moiety. The antisense oligonucleotide further comprises at least one modified can be used in diagnostics and as research reagents and kits. It can also be used prophylactically, e.g. to prevent or delay infection, inflammation or tumour formation. It can also be used to treat a disease or condition associated with phosphoinositide-3-kinase, regulatory subunit 4, p150, e.g. hyperproliferative disorder, preferably cancer, Chediak-Higashi syndrome or a metabolic disorder. The products of the invention are immunomodulators with cytostatic activity and can be used
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       antisense; inhibitor; hybridisation; human; phosphoinositide-3-kinase; regulatory subunit 4; p150; internucleoside linkage; phosphorothicate linkage; 2'-0-methoxyethyl sugar; 5-methylcytosine; infection; inflammation; tumour formation; hyperproliferative disorder; cancer; Chediak-Higashi syndrome; metabolic disorder; immunomodulator;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Phosphoinositide-3-kinase regulatory subunit 4 p150 fragment 124623
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                0.4%; Score 20; DB 1; Length 20;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Sequence 20 BP; 6 A; 3 C; 7 G; 4 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                100.0%; Pred. No. 1.4e+02; tive 0; Mismatches 0;
Example 15; SEQ ID NO 98; 60pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GGCAGTATGTGCGAGACAAT 894
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GGCAGTATGTGCGAGACAAT 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ADL34664 standard; DNA; 20 BP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    18-SEP-2003; 2003US-00667022
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 31-MAY-2002; 2002US-00160786
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    cytostatic; gene therapy; ds
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Local Similarity 100.
Les 20, Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Freier SM, Dobie KW;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       (FREI/) FREIER S M.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       (DOBI/) DOBIE K W.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         for gene therapy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          US2004063657-A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   17-JUN-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       01-APR-2004.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             875
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ADL34664;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             RESULT 20
ADL34664
```

8

ઠે

New antisense compound targeted to a nucleic acid molecule encoding phosphoinositide-3-kinase, regulatory subunit 4, p150, useful for treating cancer, Chediak-Higashi syndrome or a metabolic disorder.

WPI; 2004-282523/26.

This invention describes a novel antisense oligonuclectides which specifically hybridises to and inhibits the expression of human phospholnositide-3-kinase, regulatory subunit 4, p150. The

Example 15; SEQ ID NO 110; 60pp; English.

```
ô
preferably a phosphorothioate linkage. It also comprises at least one modified engar molety, preferably a 2'-O-methoxyethyl sugar molety. The antieense oligomuclectide further comprises at least one antieense oligomuclectide further comprises at least one modified nucleobase, preferably a 5-methylcytosine. The antieense oligomuclectide further comprises at least one modified on be used in diagnostics and as research reagents and kits. It can also be used prophylactically, e.g. to prevent or delay infection, inflammation or tumour formation. It can also be used to treat a disease or condition associated with phosphoinositide-3-kinase, regulatory subunit 4, p150, e.g. hyperproliferative disorder, preferably cancer, chediak-Higashi syndrome or a metabolic disorder. The products of the invention are immunomodulators with cytostatic activity and can be used
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          This invention describes a novel antisense oligonucleotides which specifically hybridises to and inhibits the expression of human phosphoinositide-3-kinase, regulatory subunit 4, p150. The specification oligonucleotides comprises at least one modified internucleoside linkage, preferably a phosphorothioate linkage. It also comprises at least one andified augar molety, preferably a 2-0-methoxyethyl sugar molety. The antisense oligonucleotide further comprises at least one modified nucleobase, preferably a 5-methylcytosine. The antisense oligonucleotide
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            antisense; inhibitor; hybridisation; human; phosphoinositide-3-kinase; regulatory subunit 4; p150; internucleoside linkage; phosphorothioate linkage; 2'-O-methoxyethyl sugar; 5-methylcytosine; infection; inflammation; tumour formation; hyperproliferative disorder; cancer; Chediak-Higashi syndrome; metabolic disorder; immunomodulator; cytostatic; gene therapy; ds.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Gape
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Phosphoinositide-3-kinase regulatory subunit 4 p150 fragment 124642.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         New antisense compound targeted to a nucleic acid molecule encoding phosphoinositide-3-kinase, regulatory subunit 4, p150, useful for treating cancer, Chediak-Higashi syndrome or a metabolic disorder.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ö
                                                                                                                                                                                                                                                                                                                                                                                                           0.4%; Score 20; DB 1; Length 20;
100.0%; Pred. No. 1.4e+02;
ative 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                               Sequence 20 BP; 5 A; 6 C; 2 G; 7 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Example 15; SEQ ID NO 128; 60pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1706 CTGTTATAACATCCTGCCTA 1725
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1 crerrarakcarccreccra 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ADL34682 standard; DNA; 20 BP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              18-SEP-2003; 2003US-00667022.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  31-MAY-2002; 2002US-00160786
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  17-JUN-2004 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                20; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Freier SM, Dobie KW;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                WPI; 2004-282523/26.
                                                                                                                                                                                                                                                                                                                                                                                                           Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    (FREI/) FREIER S M.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            (DOBI/) DOBIE K W.
                                                                                                                                                                                                                                                                                                                  for gene therapy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                US2004063657-A1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               01-APR-2004.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ADL34682;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             RESULT 206
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Matches
```

```
This invention describes a novel antisense oligonucleotides which specifically hybridises to and inhibits the expression of human phosphoinositide-3-kinase, regulatory submit 4, pl50. The oligonucleotides comprises at least one modified internucleoside linkage, preferably a phosphorothioate linkage. It also comprises at least one modified sugar moiety, preferably a 2'-0-methoxyethyl sugar moiety. The antisense oligonucleotide further comprises at least one modified antisense oligonucleotide further comprises at least one modified antisense oligonucleotide bused prophylactically, e.g. to prevent or delay infection, be used in diagnostics and as research reagents and kits. It can also be used prophylactically, e.g. to prevent or delay infection, inflammation or tumour formation. It can also be used to treat a disease or condition associated with phosphoinositide-3-kinase, regulatory submnit 4, pl50, e.g. hyperproliferative disorder, preferably cancer,
                                                                                                                                                                                                                                                                       ö
research reagents and kits. It can also
can be used in diagnostics and as research reagents and kits. It can also be used prophylactically, e.g. to prevent or delay infection, inflammation or tumour formation. It can also be used to treat a disease or condition associated with phosphoinositide-3-kinase, regulatory subunit 4, p150, e.g. hyperproliferative disorder, preferably cancer, chediak-Higashi syndrome or a metabolic disorder. The products of the invention are immunomodulators with cytostatic activity and can be used
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             regulatory subunit 4; pls0; intermucleoside linkage;
phosphorothioate linkage; 2'-O-methoxyethyl sugar; 5-methylcytosine;
infection; inflammation; tumour formation; hyperproliferative disorder;
cancer; Chediak-Higashi syndrome; metabolic disorder; immunomodulator;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            antisense; inhibitor; hybridisation; human; phosphoinositide-3-kinase;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Phosphoinositide-3-kinase regulatory subunit 4 p150 fragment 124644.
                                                                                                                                                                                                                                                                       Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               New antisense compound targeted to a nucleic acid molecule encoding phosphoinositide-3-kinase, regulatory subunit 4, p150, useful for treating cancer, Chediak-Higashi syndrome or a metabolic disorder.
                                                                                                                                                                                                                                                                       ;
                                                                                                                                                                                                                             Length 20;
                                                                                                                                                                                                                                                                       0; Indels
                                                                                                                                                                                    Sequence 20 BP; 6 A; 6 C; 2 G; 6 T; 0 U; 0 Other;
                                                                                                                                                                                                                             0.4%; Score 20; DB 1; Le
100.0%; Pred. No. 1.4e+02;
ive 0; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Example 15; SEQ ID NO 130; 60pp; English.
                                                                                                                                                                                                                                                                                                                   3341 GTAGTACAATCTTACCATCC 3360
                                                                                                                                                                                                                                                                                                                                             GTAGTACAATCTTACCATCC 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                ADL34684 standard; DNA; 20 BP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            cytostatic; gene therapy; ds.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 31-MAY-2002; 2002US-00160786
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          18-SEP-2003; 2003US-00667022
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     (first entry)
                                                                                                                                                                                                                                                                              Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Freier SM, Dobie KW;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                WPI; 2004-282523/26.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             FREI/) FREIER S M.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               (DOBI/) DOBIE K W.
                                                                                                                                                                                                                                                          Similarity
                                                                                                                                                     for gene therapy.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             US2004063657-A1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    01-APR-2004.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   17-JUN-2004
                                                                                                                                                                                                                                                                              20;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ADL34684;
                                                                                                                                                                                                                                      Query Match
Best Local 9
                                                                                                                                                                                                                                                                                                                                                                                                                            RESULT 207
                                                                                                                                                                                                                                                                              Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        88888888888
```

```
This invention describes a novel antisense oligonucleotides which specifically hybridises to and inhibits the expression of human phosphoinostitée-3-kinase, regulatory submit 4, pl50. The oligonucleotides comprises at least one modified internucleoside linkage, preferably a phosphorothicate linkage. It also comprises at least one modified sugar motety, preferably a 2'-0-methoxyethyl sugar motety. The antisense oligonucleotide further comprises at least one modified nucleobase, preferably a 5-methylcytosine. The antisense oligonucleotide can be used in diagnostics and as research reagents and kire. It can also be used prophylactically, e.g. to prevent or delay infection, inflammation or tumour formation. It can also be used to treat a disease or condition associated with phosphoinositide-3-kinase, regulatory
                                                                                                                                           ö
                                                                                                                                                                                                                                                                                                                                                                                                                                        antisense; inhibitor; hybridisation; human; phosphoinositide-3-kinase; regulatory subunit 4; p150; internucleoside linkage; phosphorothioate linkage; 2'-O-methoxyethyl sugar; 5-methylcytosine; infection; inflammation; tumour formation; hyperproliferative disorder; cancer; Chediak-Higashi syndrome; metabolic disorder; immunomodulator; cytostatic; gene therapy; ss; primer.
Chediak-Higashi syndrome or a metabolic disorder. The products of the invention are immunomodulators with cytostatic activity and can be used
                                                                                                                                           Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               New antisense compound targeted to a nucleic acid molecule encoding phosphoinositide-3-kinase, regulatory subunit 4, p150, useful for treating cancer, Chediak-Higashi syndrome or a metabolic disorder.
                                                                                                                                           ö
                                                                                                          0.4%; Score 20; DB 1; Length 20;
.00.0%; Pred. No. 1.4e+02;
                                                                                                                                           0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             /note= "phosphorothioate backbone"
                                                                        Sequence 20 BP; 7 A; 3 C; 6 G; 4 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                              ISIS antisense oligonucleotide ISIS 207000.
                                                                                                                              100.0%; Pred. No. 1.4 cive 0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Example 15; SEQ ID NO 54; 60pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Location/Qualifiers
                                                                                                                                                                                3431 GCAATGCTGAGAGAATAGCT 3450
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 base= OTHER
                                                                                                                                                                                                       1 GCAATGCTGAGAGAATAGCT
                                                                                                                                                                                                                                                                                                         ADL34608 standard; DNA; 20 BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         18-SEP-2003; 2003US-00667022
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        31-MAY-2002; 2002US-00160786
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ...20
*tag= a
                                                                                                                                                                                                                                                                                                                                                                                (first entry)
                                                                                                             Query Match 0.4°
Best Local Similarity 100.
Matches 20; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Dobie KW;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     mod/
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   WPI; 2004-282523/26.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             (FREI/) FREIER S M. (DOBI/) DOBIE K W.
                                            for gene therapy.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       US2004063657-A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  modified base
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         01-APR-2004.
                                                                                                                                                                                                                                                                                                                                                                                  17-JUN-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Freier SM,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Synthetic.
                                                                                                                                                                                                                                                                                                                                                ADL34608;
                                                                                                                                                                                                                                                                             RESULT 208
                                                                                                                                                                                                                                                                                              ADL34608/
                                                                                                                                                                                                                                                                                                                              8 X C C C
                                                                                                                                                                                        8
                                                                                                                                                                                                                     셤
```

```
Synthetic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ADL34626;
                                                                                                                                                                                                                           Matches
                                                                                                                                                                                                                                                                                                                                                                              RESULT
    ឧស្តឧឧឧ
                                                                                                                                                                                                                                                                                                         셤
                                                                                                                                                                                                                                                                                                                                                                                                                                              8
                                                                                                                                                                                                  ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          This invention describes a novel antisense oligonucleotides which specifically hybridises to and inhibits the expression of human phosphoinositide-1-kinase, regulatory subunit 4, p150. The oligonucleotides comprises at least one modified internucleoside linkage, preferably a phosphorothioate linkage. It also comprises at least one modified ougar modety. The antisense oligonucleotide further comprises at least one modified antisense oligonucleotide further comprises at least one modified antisense oligonucleotide further comprises at least one modified nucleobase, preferably a 5-methylcytosine. The antisense oligonucleotide can be used in diagnostics and as research reagents and kits. It can also be used prophylactically, e.g. to prevent or delay infection, inflammation or tumour formation. It can also be used to treat a disease
subunit 4, p150, e.g. hyperproliferative disorder, preferably cancer, Chediak-Higashi syndrome or a metabolic disorder. The products of the invention are immunomodulators with cytostatic activity and can be used
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       antisense; inhibitor; hybridisation; human; phosphoinositide-3-kinase; regulatory subunit 4; p150; internucleoside linkage; phosphorothioate linkage; 2'-O-methoxysteltyl sugar; 5-methylcytosine; infection; inflammation; tumour formation; hyperproliferative disorder; cancer; Chediak-Higashi syndrome; metabolic disorder; immunomodulator;
                                                                                                                                                                                                    Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 New antisense compound targeted to a nucleic acid molecule encoding
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        phosphoinositide-3-kinase, regulatory subunit 4, p150, useful for
treating cancer, Chediak-Higashi syndrome or a metabolic disorder.
                                                                                                                                                                                                  ö
                                                                                                                                                         Length 20;
                                                                                                                                                                                                  IndelB
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     /note= "phosphorothioate backbone"
                                                                                                           Sequence 20 BP; 5 A; 3 C; 8 G; 4 T; 0 U; 0 Other;
                                                                                                                                                                                                  ö
                                                                                                                                                    0.4%; Score 20; DB 1; L4 100.0%; Pred. No. 1.4e+02; tive 0; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ISIS antisense oligonucleotide ISIS 207010.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Example 15; SEQ ID NO 64; 60pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          cytostatic; gene therapy; ss; primer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Location/Qualifiers
                                                                                                                                                                                                                                                2879
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              /mod_base= OTHER
                                                                                                                                                                                                                                                                                       ч
                                                                                                                                                                                                                                         CCTGCCATAGCACAGCTTCT
                                                                                                                                                                                                                                                                                                                                                                                                  ВР
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     18-SEP-2003; 2003US-00667022
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               31-MAY-2002; 2002US-00160786
                                                                                                                                                                                                                                                                                                                                                                                                  ADL34618 standard; DNA; 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       (first entry)
                                                                                                                                                                                                  Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Freier SM, Dobie KW;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      WPI; 2004-282523/26
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        (FREI/) FREIER S M.
                                                                                                                                                                         Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               DOBIE K W.
                                                                    for gene therapy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 US2004063657-A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Key
modified_base
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       17-JUN-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            01-APR-2004
                                                                                                                                                                                                  20;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Synthetic.
                                                                                                                                                                                                                                              2860
                                                                                                                                                                                                                                                                                       20
                                                                                                                                                                                                                                                                                                                                                                                                                                           ADL34618;
                                                                                                                                                       Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 (DOBI/)
                                                                                                                                                                                                                                                                                                                                                         209
                                                                                                                                                                                                Matches
                                                                                                                                                                                                                                                                                                                                                                           A DL J A 
                                                                                                                                                                                                                                                                                                                                                         RESULT
  8888888
                                                                                                                                                                                                                                                ઠે
                                                                                                                                                                                                                                                                                  셤
```

```
ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 specifically hybridises to and inhibits the expression of human phosphoinositide-13-kinase, regulatory subunit 4, pl50. The oligonucleotides comprises at least one modified internucleoside linkage, preferably a phosphorothicate linkage. It also comprises at least one modified sugar moiety, preferably a 2'-0-methoxyethyl sugar moiety. The antisense oligonucleotide further comprises at least one modified nucleobase, preferably a 5-methyloycosine. The antisense oligonucleotide can be used in diagnostics and as research reagents and kits. It can also
or condition associated with phosphoinositide-3-kinase, regulatory subunit 4, p150, e.g. hyperproliferative disorder, prefedrably cancer, Chediak-Higashi syndrome or a metabolic disorder. The products of the invention are immunomodulators with cytostatic activity and can be used
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            antisense; inhibitor; hybridisation; human; phosphoinositide-3-kinase; regulatory subunit 4; pl50; internucleoside linkage; phosphorochioate linkage; 2'-O-methoxyethyl sugar; 5-methylcytosine; infection; inflammation; tumour formation; hyperproliferative disorder; cancer; Chediak-Higashi syndrome; metabolic disorder; immunomodulator;
                                                                                                                                                                                                                                                                                                                             Gарв
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            New antisense compound targeted to a nucleic acid molecule encoding
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          phosphoinositide-3-kinase, regulatory subunit 4, p150, useful for treating cancer, Chediak-Higashi syndrome or a metabolic disorder.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         This invention describes a novel antisense oligonucleotides which
                                                                                                                                                                                                                                                                                                                                 ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     pe used prophylactically, e.g. to prevent or delay infection,
                                                                                                                                                                                                                                                                Length 20;
                                                                                                                                                                                                                                                                                                                             Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               /note= "phosphorothioate backbone"
                                                                                                                                                                                                                                                             DB 1; Le
1.4e+02;
                                                                                                                                                                                                Sequence 20 BP; 5 A; 7 C; 4 G; 4 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ISIS antisense oligonucleotide ISIS 207026.
                                                                                                                                                                                                                                                                                                                          0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Example 15; SEQ ID NO 72; 60pp; English.
                                                                                                                                                                                                                                                                Score 20;
Pred. No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  cytostatic, gene therapy; ss, primer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                             3504 GCGTCCTAAAGGGCTGTTAG 3523
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 base= OTHER
                                                                                                                                                                                                                                                                                                                                                                                                                                      20 GCGTCCTAAAGGCTGTTAG 1
                                                                                                                                                                                                                                                                100.0%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                18-SEP-2003; 2003US-00667022
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             31-MAY-2002; 2002US-00160786
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ADL34626/c
ID ADL34626 standard; DNA; 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1. .20
/*tag= a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      (first entry)
                                                                                                                                                                                                                                                                                                                             20; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Freier SM, Dobie KW;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     WPI; 2004-282523/26
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         (FREI/) FREIER S M. (DOBI/) DOBIE K W.
                                                                                                                                                                                                                                                                Query Match
Best Local Similarity
                                                                                                                                   for gene therapy.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   US2004063657-A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Key
modified_base
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      17-JUN-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                01-APR-2004
```

```
This invention describes a novel antisense oligonucleotides which specifically hybridises to and inhibits the expression of human phosphoinositide-3-kinase, regulatory subunit 4, p150. The phosphoinositides comprises at least one modified internucleoside linkage, preferably a phosphorothioate linkage. It also comprises at least one modified sugar moiety, preferably a 2-0-methoxysthyl sugar moiety. The antisense oligonucleotide further comprises at least one modified nucleobase, preferably a 5-methylycytosine. The antisense oligonucleotide can be used in diagnostics and as research reagents and kits. It can also
                                                                                                                                                                                          ö
inflammation or tumour formation. It can also be used to treat a disease or condition associated with phosphoinositide-3-kinase, regulatory subunit 4, p150, e.g. hyperproliferative disorder, preferably cancer, cfeddiak-Higashi syndrome or a metabolic disorder. The products of the invention are immunomodulators with cytostatic activity and can be used
   can also be used to treat a disease
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            regulatory subunit 4; p150; internucleoside linkage; phosphoinositide-3-kinase; phosphorothioate linkage; 2'-O-methoxyethyl sugar; 5-methylcytosine; infection; inflammation; tumour formation; hyperproliferative disorder; cancer; Chediak-Higashi syndrome; metabolic disorder; immunomodulator;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             New antisense compound targeted to a nucleic acid molecule encoding phosphoinositide-3-kinase, regulatory subunit 4, p150, useful for treating cancer, Chediak-Higashi syndrome or a metabolic disorder.
                                                                                                                                                                                           Gaps
                                                                                                                                                                                           ö
                                                                                                                                                    0.4%; Score 20; DB 1; Length 20; 100.0%; Pred. No. 1.4e+02; rive 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          /note= "phosphorothioate backbone"
                                                                                                                       Sequence 20 BP; 7 A; 2 C; 2 G; 9 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                   ISIS antisense oligonucleotide ISIS 207033.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Example 15; SEQ ID NO 79; 60pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     cytostatic; gene therapy; ss; primer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           cocation/Qualifiers
                                                                                                                                                                                                                              3967 ACTITAAAGCATGATTTAAA 3986
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          base= OTHER
                                                                                                                                                                                                                                                                20 acrtraaagcargarrraaa 1
                                                                                                                                                                                                                                                                                                                                                    ADL34633 standard; DNA; 20 BP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            31-MAY-2002; 2002US-00160786
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 18-SEP-2003; 2003US-00667022
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ĸ
                                                                                                                                                                                                                                                                                                                                                                                                                      (first entry)
                                                                                                                                                                               1 Similarity 100.
20; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               . .20
*tag=
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Dobie KW;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    WPI; 2004-282523/26.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    (FREI/) FREIER S M.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      (DOBI/) DOBIE K W.
                                                                                           for gene therapy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 US2004063657-A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Key
modified_base
                                                                                                                                                                                                                                                                                                                                                                                                                        17-JUN-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 01-APR-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Freier SM,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Synthetic.
                                                                                                                                                                                                                                                                                                                                                                                       ADL34633;
                                                                                                                                                                 Query Match
                                                                                                                                                                                   Best Local
                                                                                                                                                                                                                                                                                                                     RESULT 211
                                                                                                                                                                                                                                                                                                                                         ADL34633/
                                                                                                                                                                                                                                                                                                                                                         셤
              888888888
                                                                                                                                                                                                                                     Š
```

```
This invention describes a novel antisense oligomucleotides which specifically hybridises to and inhibits the expression of human pecifically hybridises to and inhibits the expression of human colorably alteratives at least one modified internucleoside linkage. Colorably a phosphorothioste linkage. It also comprises at least one modified sugar moiety, preferably a 2'-0-methoxyethyl sugar moiety. The antisense oligonucleotide further comprises at least one modified can be used in diagnostics and as research reagents and kits. It can also be used prophylactically, e.g. to prevent or delay infection, discording the pospholiositide-3-kinase, regulatory or condition associated with phosphoinositide-3-kinase, regulatory submit 4, p150, e.g. hyperproliferative disorder, preferably cancer, chediak-Higashi syndrome or a metabolic disorder. The products of the
                                                                                                                                                                                                                                            ..
be used prophylactically, e.g. to prevent or delay infection, inflammation or tumour formation. It can also be used to treat a disease or condition associated with phosphoinositide-3-kinase, regulatory subunit 4, p150, e.g. hyperproliferative disorder, preferably cancer, chediak-Higashi syndrome or a metabolic disorder. The products of the invention are immunomodulators with cytostatic activity and can be used
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   antisense; inhibitor; hybridisation; human; phosphoinositide-3-kinase; regulatory subunit 4; p150; internucleoside linkage; linkage; b-nethoxyethyl sugar; 5-methylcytosine; phosphorochinoate linkage; 2'-O-methoxyethyl sugar; 5-methylcytosine; infection; inflammation; tumour formation; hyperproliferative disorder cancer; chediak-Higashi syndrome; metabolic disorder; immunomodulator;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     New antisense compound targeted to a nucleic acid molecule encoding phosphoinositide-3-kinase, regulatory subunit 4, p150, useful for treating cancer, Chediak-Higashi syndrome or a metabolic disorder.
                                                                                                                                                                                                                                                Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Phosphoinositide-3-kinase regulatory subunit 4 p150 fragment 124598.
                                                                                                                                                                                                                                              ö
                                                                                                                                                                                                      Length 20;
                                                                                                                                                                                                                                              Indels
                                                                                                                                                                                                                                                ;
0
                                                                                                                                                                Sequence 20 BP; 4 A; 5 C; 5 G; 6 T; 0 U; 0 Other;
                                                                                                                                                                                                        DB 1; Le
                                                                                                                                                                                                        0.4%; Score 20; DB
100.0%; Pred. No. 1.4
tive 0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Example 15; SEQ ID NO 93; 60pp; English.
                                                                                                                                                                                                                                                                                      4309 AGICCIGCAGAIGGAAAICC 4328
                                                                                                                                                                                                                                                                                                                    BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   cytostatic; gene therapy; ds.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         18-SEP-2003; 2003US-00667022.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               31-MAY-2002; 2002US-00160786
                                                                                                                                                                                                                                                                                                                                                                                                                                      ADL34647 standard; DNA; 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 17-JUN-2004 (first entry)
                                                                                                                                                                                                                                                    20; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Dobie KW;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          WPI; 2004-282523/26.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         (FREI/) FREIER S M.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                (DOBI/) DOBIE K W.
                                                                                                                                                                                                                Query Match
Best Local Similarity
                                                                                                                                  for gene therapy.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               US2004063657-A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         01-APR-2004.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Freier SM,
                                                                                                                                                                                                                                                                                                                                       20
                                                                                                                                                                                                                                                           Matches
                                                                                                                                                                                                                                                                                                                                                                                                  RESULT
                                                                                                                                                                                                                                                                                                                                                                                                                                          셤
                88888888888
                                                                                                                                                                                                                                                                                                 ð
```

ઠ

```
modified base
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          01-APR-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Freier SM,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Synthetic.
                                                                                                                                                                                                                                                                                                                    ADL34583;
                                                                                                  Query Match
                                                                                                                                                                                                                                                    RESULT 214
                                                                                                                                                                                                                                                                     ADL34583,
 ន្តដូមូខូម
                                                                                                                                                                    ઠ
                                                                                                                                                                                              g
                                                                                                                  ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      This invention describes a novel antisense oligonucleotides which specifically hybridises to and inhibits the expression of human oligonatide-1-kinase, regulatory subunit 4, pl50. The oligonucleotides comprises at least one modified internucleoside linkage, preferably a phosphorothioate linkage. It also comprises at least one modified sugar moiety, preferably a 2'-O-methoxyethyl sugar moiety. The antisense oligonucleotide further comprises at least one modified nucleobase, preferably a 5-methylcytosine. The antisense oligonucleotide can be used prophylactically, e.g. to prevent or delay infection, inflammation or tumour formation. It can also be used prophylactically, e.g. to prevent or delay infection, inflammation or tumour formation. It can also be used to treat a disease or condition associated with phosphoinositide-3-kinase, regulatory subunit 4, pl50, e.g. hyperproliferative disorder, preferably cancer,
                                                                                                                                                                                                                                                                                                                                                                                                antisense; inhibitor; hybridisation; human; phosphoinositide-3-kinase; regulatory subunit 4; p150; internucleoside linkage; phosphorothioate linkage; 2'-O-methoxyethyl sugar; 5-methylcytosine; infection; inflammation; thomour formation; hyperproliferative disorder; cancer; Chediak-Higashi syndrome; metabolic disorder; immunomodulator;
 Invention are immunomodulators with cytostatic activity and can be used
                                                                                                                    Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          New antisense compound targeted to a nucleic acid molecule encoding phosphoinositide-3-kinase, regulatory subunit 4, p150, useful for treating cancer, Chediak-Higashi syndrome or a metabolic disorder.
                                                                                                                  ö
                                                                             0.4%; Score 20; DB 1; Length 20;
100.0%; Pred. No. 1.4e+02;
tive 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     /note= "phosphorothioate backbone"
                                                Sequence 20 BP; 9 A; 6 C; 2 G; 3 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                   ISIS antisense oligonucleotide ISIS 206969.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Example 15; SEQ ID NO 23; 60pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     cytostatic; gene therapy; ss; primer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Location/Qualifiers
                                                                                                                                                 534 AACCTTACTAAAGACCACAG 553
                                                                                                                                                                      AACCTTACTAAAGACCACAG 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     base= OTHER
                                                                                                                                                                                                                                                                     BP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      18-SEP-2003; 2003US-00667022.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         31-MAY-2002; 2002US-00160786.
                                                                                                                                                                                                                                                                  ADL34577 standard; DNA; 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        æ
                                                                                                                                                                                                                                                                                                                                  (first entry)
                                                                                                                  20; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1. .20
/*tag=
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Preier SM, Dobie KW;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         WPI; 2004-282523/26.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      (FREI/) FREIER S M. (DOBI/) DOBIE K W.
                                                                                                  Similarity
                   for gene therapy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        US2004063657-A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Key
modified_base
                                                                                                                                                                                                                                                                                                                                   17-JUN-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         01-APR-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Synthetic
                                                                                                                                                                                                                                                                                                  ADL34577;
                                                                                 Query Match
                                                                                                    Local
                                                                                                                Matches
                                                                                                                                                                                                                                  RESULT 21.
ន្តដូន
                                                                                                                                                                             셤
```

```
ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          This invention describes a novel antisense oligonucleotides which specifically hybridises to and inhibits the expression of human phosphoinositide-3-kinase, regulatory subunit 4, pl50. The oligonucleotides comprises at least one modified internucleoside linkage, preferably a phosphorothioate linkage. It also comprises at least one modified sugar molety. The antisense oligonucleotide further comprises at least one antisense oligonucleotide further comprises at least one modified nucleobase, preferably a 5-methylcytosine. The antisense oligonucleotide can be used in diagnostics and as research reagents and kits. It can also be used prophylactically, e.g. to prevent or delay infection, inflammation or tumour formation. It can also be used to treat a disease or condition associated with phosphoinositide-3-kinase, regulatory
Chediak-Higashi syndrome or a metabolic disorder. The products of the invention are immunomodulators with cytostatic activity and can be used
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           antisense; inhibitor; hybridisation; human; phosphoinositide-3-kinase; regulatory subunit 4; p150; internucleoside linkage; phosphorothioare linkage; 2'-O-methoxyethyl sugar; 5-methylcytosine; infection; inflammation; tumour formation; hyperproliferative disorder; cancer; Chediak-Higashi syndrome; metabolic disorder; immunomodulator; cytostatic; gene therapy; ss; primer.
                                                                                                                                                     Сарв
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               New antisense compound targeted to a nucleic acid molecule encoding phosphoinositide-3-kinase, regulatory subunit 4, p150, useful for treating cancer, Chediak-Higashi syndrome or a metabolic disorder.
                                                                                                                                                       ö
                                                                                                                 Length 20;
                                                                                                                                                 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    /note= "phosphorothioate backbone"
                                                                           Sequence 20 BP; 4 A; 7 C; 3 G; 6 T; 0 U; 0 Other;
                                                                                                               DB 1; Le
                                                                                                                                                                                                                                                                                                                                                                                                                                            ISIS antisense oligonucleotide ISIS 206975.
                                                                                                                                 100.0%; Pred. No. 1.4
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Example 15; SEQ ID NO 29; 60pp; English.
                                                                                                               0.4%; Score 20;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Location/Qualifiers
                                                                                                                                                                                         875 GGCAGTATGTGCGAGACAAT 894
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                base= OTHER
                                                                                                                                                                                                                          20 GGCAGTATGTGCGAGACAAT 1
                                                                                                                                                                                                                                                                                                                            ВЪ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  18-SEP-2003; 2003US-00667022
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        31-MAY-2002; 2002US-00160786
                                                                                                                                                                                                                                                                                                                            ADL34583 standard; DNA; 20
                                                                                                                                                                                                                                                                                                                                                                                                      17-JUN-2004 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              æ
                                                                                                                                                     Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1. .20
/*tag=
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Dobie KW;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         WPI; 2004-282523/26.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             (FREI/) FREIER S M.
                                                                                                                                 Best Local Similarity
Matches 20; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               (DOBI/) DOBIE K W.
                                     for gene therapy.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      US2004063657-A1
```

ð 셤

```
01-APR-2004.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      17-JUN-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Freier SM,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Synthetic.
                                                                                                                                                                                                                                                                                                               20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ADL34595
                                                                                                                                                                             Query Match
                                                                                                                                                                                                    Best Loca
Matches
                                                                                                                                                                                                                                                                                                                                                                                                         ADL34595,
                                                                                                                                                                                                                                                                                                                                                                                                                                                    88333333
                                                                                                                                                                                                                                                                                                                 용
                                                                                                                                                                                                                                                                       8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       This invention describes a novel antisense oligonucleotides which specifically hybridises to and inhibits the expression of human phosphoinostides—3-kinase, regulatory subunit 4, p160. The phosphorotises at least one modified internucleoside linkage, preferably a phosphorothioate linkage. It also comprises at least one modified a sugar moiety, preferably a 2'-0-methoxyethyl sugar moiety. The antisense oligonucleotide further comprises at least one modified nucleobase, preferably a 5-methylcytosine. The antisense oligonucleotide further comprises at least one modified on be used in diagnostics and as research reagents and kits. It can also be used prophylactically, e.g. to prevent or delay infection, inflammation or tumour formation. It can also be used to treat a disease
                                                                                                                                                                                                       ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      antisense; inhibitor; hybridisation; human; phosphoinositide-3-kinase; regulatory subunit 4; p150; internucleoside linkage; phosphorothioate linkage; 2'-0-methoxysterbyl sugar; 5-methylcytosine; infection; inflammation; tumour formation; hyperproliferative disorder; cancer; Chediak-Higashi syndrome; metabolic disorder; immunomodulator; cytostatic; gene therapy; ss; primer.
subunit 4, p150, e.g. hyperproliferative disorder, preferably cancer, Chediak-Higashi syndrome or a metabolic disorder. The products of the invention are immunomodulators with cytostatic activity and can be used
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       New antisense compound targeted to a nucleic acid molecule encoding phosphoinositide 3-kinase, regulatory subunit 4, p150, useful for treating cancer, Chediak-Higashi syndrome or a metabolic disorder.
                                                                                                                                                                                                         Gaps
                                                                                                                                                                                                         ö
                                                                                                                                                            Score 20; DB 1; Length 20;
Pred. No. 1.4e+02;
                                                                                                                                                                                                       0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            /note= "phosphorothioate backbone"
                                                                                                               Sequence 20 BP; 9 A; 1 C; 4 G; 6 T; 0 U; 0 Other;
                                                                                                                                                0.4%; Scor.
100.0%; Pred. No. ...
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ISIS antisense oligonucleotide ISIS 206984.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Example 15; SEQ ID NO 38; 60pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Location/Qualifiers
                                                                                                                                                                                                                                                      1115 TCAATTATTTCTTTGACACA 1134
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    /mod_base= OTHER
                                                                                                                                                                                                                                                                                                 20 rcaarrarricrirgacaca
                                                                                                                                                                                                                                                                                                                                                                                                                   ADL34592 standard; DNA; 20 BP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              18-SEP-2003; 2003US-00667022.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         31-MAY-2002; 2002US-00160786.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ಹ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          (first entry)
                                                                                                                                                                                                           20; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            . .20
*tag=
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Freier SM, Dobie KW;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   WPI; 2004-282523/26.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      (FREI/) FREIER S M. (DOBI/) DOBIE K W.
                                                                                                                                                                   Query Match
Best Local Similarity
                                                                           for gene therapy.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           US2004063657-A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Key
modified_base
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          17-JUN-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      01-APR-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Synthetic.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                ADL34592;
                                                                                                                                                                                                                                                                                                                                                              RESULT 215
ADL34592/C
ID ADL345
XX
AC ADL345
XX
DT 17-JUI
XX
DE ISIS
XX
COCCCC
CCC
CCC
CCC
CCC
CDA ADL345
AC ADL345
```

```
ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          This invention describes a novel antisense oligonucleotides which specifically hybridises to and inhibits the expression of human phosphoinositide-3-kinase, regulatory submit 4, p150. The oligonucleotides comprises at least one modified internucleoside linkage, preferably a phosphorothioate linkage. It also comprises at least one modified sugar moiety, preferably a 2'-O-methoxyethyl sugar moiety. The antisense oligonucleotide further comprises at least one mucleobase, preferably a 5-methylcytosine. The antisense oligonucleotide can be used in diagnostics and as research reagents and kits. It can also be used prophylactically, e.g. to prevent or delay infection,
or condition associated with phosphoinositide-3-kinase, regulatory subunit 4, p150, e.g. hyperproliferative disorder, preferably cancer, chediak-Higashi syndrome or a metabolic disorder. The products of the invention are immunomodulators with cytostatic activity and can be used
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          antisense; inhibitor; hybridisation; human; phosphoinositide-3-kinase; regulatory subunit 4; p150; internucleoside linkage; phosphorothioare linkage; 2'-O-methoxystehyl sugar; 5-methylcytosine; infection; inflammation; tumour formation; hyperproliferative disorder; cancer; Chediak-Higashi syndrome; metabolic disorder; immunomodulator;
                                                                                                                                                                                                                                                                                                                                      Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           encoding
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 New antisense compound targeted to a nucleic acid molecule encodir
phosphoinositide-3-kinase, regulatory subunit 4, p150, useful for
treating cancer, Chediak-Higashi syndrome or a metabolic disorder.
                                                                                                                                                                                                                                                                                                                                         ö
                                                                                                                                                                                                                                                                    Length 20;
                                                                                                                                                                                                                                                                                                                                         Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             /note= "phosphorothioate backbone"
                                                                                                                                                                                                                                                                        DB 1; Le
1.4e+02;
                                                                                                                                                                                                       Sequence 20 BP; 7 A; 1 C; 8 G; 4 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ISIS antisense oligonucleotide ISIS 206987.
                                                                                                                                                                                                                                                                    0.4%; Score 20; DB 100.0%; Pred. No. 1.4
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Example 15; SEQ ID NO 41; 60pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         cytostatic; gene therapy; ss; primer.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                              1529 ACACTTTTCTTCAGCCCTAC 1548
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     base= OTHER
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ACACTITICITICAGCCCIAC 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ADL34595 standard; DNA; 20 BP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 31-MAY-2002; 2002US-00160786
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    18-SEP-2003; 2003US-00667022
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1. .20
/*tag= a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               (first entry)
                                                                                                                                                                                                                                                                                                                                                20; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Dobie KW;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             WPI; 2004-282523/26.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      S
M
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      (FREI/) FREIER S M (DOBI/) DOBIE K W.
                                                                                                                                                                                                                                                                                                              Local Similarity
                                                                                                                                                   for gene therapy.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        US2004063657-A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       nodified base
```

```
ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     This invention describes a novel antisense oligonucleotides which specifically hybridises to and inhibits the expression of human phosphoinositide—3-kinase, regulatory subunit 4, p150. The profit of oligonucleotides comprises at least one modified internucleoside linkage, preferably a phosphorothioate linkage. It also comprises at least one modified sugar moiety, preferably a 2'-O-methoxyethyl sugar moiety. The antisense oligonucleotide further comprises at least one modified nucleobase, preferably a 5-methylytosine. The antisense oligonucleotide can be used in diagnostics and as research reagents and kits. It can also
inflammation or tumour formation. It can also be used to treat a disease or condition associated with phosphoinositide-3-kinase, regulatory subunit 4, p150, e.g. hyperproliferative disorder, preferably cancer, Chediak-Higashi syndrome or a metabolic disorder. The products of the invention are immunomodulators with cytostatic activity and can be used for gene therapy.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      antisense; inhibitor; hybridisation; human; phosphoinositide-3-kinase; regulatory subunit 4; p150; internucleoside linkage; phosphorothioare linkage; 2'-O-methoxysthyl sugar; S-methylcytosine; infection; inflammation; tumour formation; hyperproliferative disorder; cancer; Chediak-Higashi syndrome; metabolic disorder; immunomodulator;
                                                                                                                                                                                                                                                                                                                                                                       Gapa
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 encoding
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          New antisense compound targeted to a nucleic acid molecule encodir
phosphoinositide-3-kinase, regulatory subunit 4, p150, useful for
treating cancer, Chediak-Higashi syndrome or a metabolic disorder.
                                                                                                                                                                                                                                                                                                                                                                       ö
                                                                                                                                                                                                                                                                                                Score 20; DB 1; Length 20;
Pred. No. 1.4e+02;
                                                                                                                                                                                                                                                                                                                                                                 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              /note= "phosphorothioate backbone"
                                                                                                                                                                                                                                   Sequence 20 BP; 7 A; 2 C; 6 G; 5 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                            0.4%; Scor.
100.0%; Pred. No. 1...
... 0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ISIS antisense oligonucleotide ISIS 206992
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Example 15; SEQ ID NO 46; 60pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                cytostatic; gene therapy; ss; primer.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                 1706 CTGTTATAACATCCTGCCTA 1725
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                /mod base= OTHER
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CTGTTATAACATCCTGCCTA 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ВЪ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            18-SEP-2003; 2003US-00667022
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          31-MAY-2002; 2002US-00160786
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ADL34600 standard; DNA; 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ಹ
                                                                                                                                                                                                                                                                                                                               Local Similarity 100.
1es 20; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Freier SM, Dobie KW;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          WPI; 2004-282523/26
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       (FREI/) FREIER S M. (DOBI/) DOBIE K W.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               US2004063657-A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        modified_base
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               17-JUN-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               01-APR-2004.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Synthetic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       treating
                                                                                                                                                                                                                                                                                                Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ADL34600;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 217
                                                                                                                                                                                                                                                                                                                                     Best Loc
Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ADL34600/XX AC ADL3.4600/XX AC ADL3.4600/XXX ADL3.400B ISIS XXX ADL3.400B ISIS XXX AC ADL3.400B ISIS AC ADL3.400B 
   8888888888
                                                                                                                                                                                                                                                                                                                                                                                                                                 ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           8
```

```
ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            This invention describes a novel antisense oligonucleotides which specifically hybridises to and inhibits the expression of human phosphoinositide-3-kinase, regulatory subunit 4, p150. The oligonucleotides comprises at least one modified internucleoside linkage, preferably a phosphorothioate linkage. It also comprises at least one modified engar molety, preferably a 2-0-methoxyethyl sugar molety. The antisense oligonucleotide further comprises at least one modified nucleobase, preferably a 5-methylcytosine. The antisense oligonucleotide
be used prophylactically, e.g. to prevent or delay infection, inflammation or tumour formation. It can also be used to treat a disease or condition associated with phosphoinositide-3 kinase, regulatory subunit 4, p150, e.g. hyperproliferative disorder, preferably cancer, Chediak-Higashi syndrome or a metabolic disorder. The products of the invention are immunomodulators with cytostatic activity and can be used
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         antisense; inhibitor; hybridisation; human; phosphoinositide-3-kinase; regulatory subunit 4; p150; internucleoside linkage; phosphorothioare linkage; 2'-O-methoxyethyl sugar; 5-methylcytosine; infection; inflammation; tumour formation; hyperproliferative disorder; cancer; Chediak-Higashi syndrome; metabolic disorder; immunomodulator; cytostatic; gene therapy; ss; primer.
                                                                                                                                                                                                              Gape
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          New antisense compound targeted to a nucleic acid molecule encodin
phosphoinositide-3-kinase, regulatory subunit 4, p150, useful for
treating cancer, Chediak-Higashi syndrome or a metabolic disorder.
                                                                                                                                                                                                            ö
                                                                                                                                                                            Length 20;
                                                                                                                                                                                                   Indele
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          /note= "phosphorothioate backbone"
                                                                                                                                       Sequence 20 BP; 4 A; 3 C; 4 G; 9 T; 0 U; 0 Other;
                                                                                                                                                                        0.4%; Score 20; DB 1; Le
100.0%; Pred. No. 1.4e+02;
tive 0; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ISIS antisense oligonucleotide ISIS 207009.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Example 15; SEQ ID NO 63; 60pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Location/Qualifiers
1. .20
/*tag= a
/mod_base= OTHER
                                                                                                                                                                                                                                             2131 CCAAATGGAAATTATGACAC 2150
                                                                                                                                                                                                                                                                   CCAAATGGAAATTATGACAC 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              18-SEP-2003; 2003US-00667022
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  31-MAY-2002; 2002US-00160786
                                                                                                                                                                                                                                                                                                                                                                     ADL34617 standard; DNA; 20
                                                                                                                                                               Query Match
Best Local Similarity 100.0
***ches 20; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                          (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Dobie KW;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        WPI; 2004-282523/26.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  (FREI/) FREIER S M.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     DOBIE K W.
                                                                                                       for gene therapy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              US2004063657-A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Key
modified_base
                                                                                                                                                                                                                                                                                                                                                                                                                                          17-JUN-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Freier SM,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               01-APR-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Synthetic.
                                                                                                                                                                                                                                                                                                                                                                                                       ADL34617;
                                                                                                                                                                                                                                                                              20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     (DOBI/)
                                                                                                                                                                                                                                                                                                                                RESULT 218
                                                                                                                                                                                                                                                                                                                                                    ADL34617
 SSSSSSSSSS
                                                                                                                                                                                                                                                                                                                                                                      셤
                                                                                                                                                                                                                                             8
```

```
US2004063657-A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Key
modified_base
                                                                                                                                                                                                                                                                                                                             17-JUN-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   01-APR-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Freier SM,
                                                                                                                                                                                                                                                                                                                                                                                                                                                               Synthetic.
                                                                                                                                                                                                                                                                                                        ADL34623;
                                                                                                                                                                                                                  20
                                                                                                                                                                                                                                                        RESULT 220
                                                                                                                                                                                                                                                                     ADL34623/
ID ADL3
                                                                                                                                                                                                                                                                                                       ð
                                                                                                                                                                                                                  셤
                                                                                                                                                           ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     This invention describes a novel antisense oligonucleotides which specifically hybridises to and inhibits the expression of human phosphoinositide-3-kinase, regulatory subunit 4, p150. The oligonucleotides comprises at least one modified internucleoside linkage, preferably a phosphorothioate linkage. It also comprises at least one modified sugar moiety, preferably a 2'.0-methoxyethyl sugar moiety. The antisense oligonucleotide further comprises at least one modified
can be used in diagnostics and as research reagents and kits. It can also be used prophylactically, e.g. to prevent or delay infection, inflammation or tumour formation. It can also be used to treat a disease or condition associated with phosphoinositide-3-kinase, regulatory subunit 4, pl50, e.g. hyperproliferative disorder, preferably cancer, Chediak-Higashi syndrome or a metabolic disorder. The products of the invention are immunomodulators with cytostatic activity and can be used
                                                                                                                                                                                                                                                                                                                                                               antisense; inhibitor; hybridisation; human; phosphoinositide-3-kinase; regulatory subunit 4; p150; internucleoside linkage; phosphorochioare linkage; 2'-O-methoxyethyl sugar; 5-methylcytosine; infection; inflammation; tumour formation; hyperproliferative disorder; cancer; Chediak-Higashi syndrome; metabolic disorder; immunomodulator;
                                                                                                                                                           Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               New antisense compound targeted to a nucleic acid molecule encoding phosphoinositide-3-kinase, regulatory subunit 4, p150, useful for treating cancer, Chediak-Higashi syndrome or a metabolic disorder.
                                                                                                                                                           ö
                                                                                                                                 0.4%; Score 20; DB 1; Length 20; 100.0%; Pred. No. 1.4e+02; tive 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          /note= "phosphorothioate backbone"
                                                                                                           Sequence 20 BP; 4 A; 6 C; 1 G; 9 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                            ISIS antisense oligonucleotide ISIS 207012.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Example 15; SEQ ID NO 66; 60pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                              cytostatic; gene therapy; ss; primer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Location/Qualifiers
                                                                                                                                                                                   3455 AGATGATGGAAAATGCTGAA 3474
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                /mod base= OTHER
                                                                                                                                                                                                 20 AGATGATGGAAAATGCTGAA 1
                                                                                                                                                                                                                                                                      BP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  18-SEP-2003; 2003US-00667022
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         31-MAY-2002; 2002US-00160786
                                                                                                                                                                                                                                                                      ADL34620 standard; DNA; 20
                                                                                                                                                                                                                                                                                                                      (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ಹ
                                                                                                                                                           Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ...20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Freier SM, Dobie KW;
                                                                                                                                      Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           WPI; 2004-282523/26.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              (FREI/) FREIER S M. (DOBI/) DOBIE K W.
                                                                                       for gene therapy.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   US2004063657-A1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         modified_base
                                                                                                                                                                                                                                                                                                                      17-JUN-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            01-APR-2004.
                                                                                                                                                              20;
                                                                                                                                                                                                                                                                                                                                                                                                                                                      Synthetic
                                                                                                                                                                                                                                                                                              ADL34620;
                                                                                                                                                                                                                                                 RESULT 219
                                                                                                                                                              Matches
                                                                                                                                                                                                                                                             ADL34620/
                                                                                                                                                                                                                                                                        888888888888888
                                                                                                                                                                                                           용
                                                                                                                                                                                      ઠ
```

```
nucleobase, preferably a 5-methylcytosine. The antisense oligonucleotide can be used in diagnostics and as research reagents and kits. It can also be used prophylactically, e.g. to prevent or delay infection, inflammation or tumour formation. It can also be used to treat a disease or condition associated with phosphoinositide-3-kinase, regulatory subunit 4, pl50, e.g. hyperproliferative disorder, preferably cancer, chediak-Higashi syndrome or a metabolic disorder. The products of the invention are immunomodulators with cytostatic activity and can be used
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         This invention describes a novel antisense oligonucleotides which specifically hybridises to and inhibits the expression of human phosphoinositide-3-kinase, regulatory submit 4, p150. The oligonucleotides comprises at least one modified internucleoside linkage, preferably a phosphorothioate linkage. It also comprises at least one modified sugar moiety, preferably a 2'-0-methoxyethyl sugar moiety. The
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  antisense; inhibitor; hybridisation; human; phosphoinositide-3-kinase; regulatory subunit 4; p150; internucleoside linkage; phosphorothioace linkage; 2'-O-methoxyethyl sugar; 5-methylcytosine; infection; inflammation; tumour formation; hyperproliferative disorder; cancer; Chediak-Higashi syndrome; metabolic disorder; immunomodulator;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         New antisense compound targeted to a nucleic acid molecule encoding phosphoinositide-3-kinase, regulatory subunit 4, p150, useful for treating cancer, Chediak-Higashi syndrome or a metabolic disorder.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ;
0
                                                                                                                                                                                                                                                                                                                                                                                                              Score 20; DB 1; Length 20;
Pred. No. 1.4e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                /note= "phosphorothioate backbone"
                                                                                                                                                                                                                                                                                                                                               Sequence 20 BP; 6 A; 5 C; 3 G; 6 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                             0.4%; Scor.
100.0%; Pred. No. 1...
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ISIS antisense oligonucleotide ISIS 207023.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Example 15; SEQ ID NO 69; 60pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             cytostatic; gene therapy; ss; primer.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       3555 GAATCGAATTAGAGTCTCTG 3574
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 /mod_base= OTHER
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GAATCGAATTAGAGTCTCTG 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ВР
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       18-SEP-2003; 2003US-00667022.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          31-MAY-2002; 2002US-00160786.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ADL34623 standard; DNA; 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         l. .20
/*tag= a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                    Query Match
Best Local Similarity 100.
Matches 20; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Dobie KW;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 WPI; 2004-282523/26.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            (FREI/) FREIER S M. (DOBI/) DOBIE K W.
                                                                                                                                                                                                                                                                                    for gene therapy.
```

gibbs-10-667-022-4.rng

```
ö
antisense oligonucleotide further comprises at least one modified nucleobase, preferably a 5-methylcytosine. The antisense oligonucleotide can be used in diagnostics and as research reagents and kits. It can also be used prophylactically, e.g. to prevent or delay infection, inflammation or tumour formation. It can also be used to treat a disease or condition associated with phosphoinositide-3-kinase, regulatory subbunit 4, p150, e.g. hyperprolificative disorder, preferably cancer, chediak-Higashi syndrome or a metabolic disorder. The products of the invention are immunomodulators with cytostatic activity and can be used
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               This invention describes a novel antisense oligonucleotides which specifically hybridises to and inhibits the expression of human phosphoinositide-3-kinase, regulatory subunit 4, p150. The oligonucleotides comprises at least one modified internucleoside linkage, preferably a phosphorothioate linkage. It also comprises at least one
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            antieense; inhibitor; hybridisation; human; phosphoinositide-3-kinase; regulatory subunit 4; p150; internucleoside linkage; phosphorothioarte linkage; 2'-O-methoxysthyl sugar; 5-methylcytosine; infection; inflammation; themour formation; hyperproliferative disorder; cancer; Chediak-Higashi syndrome; metabolic disorder; immunomodulator;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Gapa
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      New antisense compound targeted to a nucleic acid molecule encoding phosphoinositide-3-kinase, regulatory subunit 4, p150, useful for treating cancer, Chediak-Higashi syndrome or a metabolic disorder.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ö
                                                                                                                                                                                                                                                                                                                                                                                                                                      0.4%; Score 20; DB 1; Length 20; 100.0%; Pred. No. 1.4e+02; ive 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          /mod_base= OTHER
/note= "phosphorothioate backbone"
                                                                                                                                                                                                                                                                                                                                                                        Seguence 20 BP; 4 A; 5 C; 6 G; 5 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ISIS antisense oligonucleotide ISIS 207029.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Example 15; SEQ ID NO 75; 60pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      cytostatic; gene therapy; ss; primer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       3781 GAGGCTTCTAAGCTGCCCAA 3800
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       OTHER
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    GAGGCTTCTAAGCTGCCCAA 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ВР
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        18-SEP-2003; 2003US-00667022.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              31-MAY-2002; 2002US-00160786
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ADL34629 standard; DNA; 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1. .20
/*tag= a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Local Similarity 100.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Freier SM, Dobie KW;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           WPI; 2004-282523/26.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            (FREI/) FREIER S M.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           (DOBI/) DOBIE K W.
                                                                                                                                                                                                                                                                                                      gene therapy.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        US2004063657-A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Key
modified_base
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  17-JUN-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          01-APR-2004.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Synthetic.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ADL34629;
                                                                                                                                                                                                                                                                                                                                                                                                                                          Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             RESULT 22:

ADL134629/C

XX

ADL13

XX

ADL13

XX

ADL13

XX

ADL13

YX

ADL13

ADL13

YX

ADL13

ADL13
                                                                                                                                                                                                                                                                                                             for
   888888888888888888
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ઠે
```

```
ö
modified sugar molety, preferably a 2'-O-methoxyethyl sugar molety. The antisense oligonucleotide further comprises at least one modified nucleobase, preferably a 5-methylcytosine. The antisense oligonucleotide can be used in diagnostics and as research reagents and kits. It can also be used prophylactically, e.g. to prevent or delay infection, inflammation or tumour formation. It can also be used to treat a disease or condition associated with phosphoinositide-3-kinase, regulatory cubounit 4, p150, e.g. hyperproliferative disorder, preferably cancer, Chediak-Higashi syndrome or a metabolic disorder. The products of the invention are immunomodulators with cytostatic activity and can be used
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     This invention describes a novel antisense oligonucleotides which specifically hybridises to and inhibits the expression of human phosphoinositides 1-kinase, regulatory subunit 4, pl50. The oligonucleotides comprises at least one modified internucleoside linkage, preferably a phosphorothioate linkage. It also comprises at least one modified sugar moiety, preferably a 2'-O-methoxyethyl sugar moiety. The antisense oligonucleotide further comprises at least one modified augar in a 5-methylcytosine. The antisense oligonucleotide can be used in diagnostics and as research reagents and kits. It can also be used prophylactically, e.g. to prevent or delay infection,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 antisense; inhibitor; hybridisation; human; phosphoinositide-3-kinase; regulatory subunit 4; p150; internucleoside linkage; phosphorothioate linkage; 2'-O-methoxytethyl sugar; 5-methylcytosine; infection; inflammation; tumour formation; hyperproliferative disorder; cancer; Chediak-Higashi syndrome; metabolic disorder; immunomodulator;
                                                                                                                                                                                                                                                                                                                                  Gape
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Phosphoinositide-3-kinase regulatory subunit 4 p150 fragment 124622.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               New antisense compound targeted to a nucleic acid molecule encoding phosphoinositide-3-kinase, regulatory subunit 4, p150, useful for treating cancer, Chediak-Higashi syndrome or a metabolic disorder.
                                                                                                                                                                                                                                                                                                                                  ö
                                                                                                                                                                                                                                                                                       Length 20;
                                                                                                                                                                                                                                                                                                                                0; Indele
                                                                                                                                                                                                                                                 Sequence 20 BP; 6 A; 7 C; 4 G; 3 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                       0.4%; Score 20; DB 1; Le
100.0%; Pred. No. 1.4e+02;
tive 0; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Example 15; SEQ ID NO 109; 60pp; English.
                                                                                                                                                                                                                                                                                                                                                                          4166 TGATTGCAGCTGTTCAGGGC 4185
                                                                                                                                                                                                                                                                                                                                                                                                                 rcarrecaccrerrcacecc 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       BP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          18-SEP-2003; 2003US-00667022.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          cytostatic; gene therapy; ds
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                31-MAY-2002; 2002US-00160786
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ADL34663 standard; DNA; 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      17-JUN-2004 (first entry)
                                                                                                                                                                                                                                                                                                                                  Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Freier SM, Dobie KW;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           WPI; 2004-282523/26.
                                                                                                                                                                                                                                                                                                        Local Similarity
les 20; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         (FREI/) FREIER S M.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              (DOBI/) DOBIE K W.
                                                                                                                                                                                                          for gene therapy.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           US2004063657-A1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   01-APR-2004.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ADL34663;
                                                                                                                                                                                                                                                                                         Query Match
                                                                                                                                                                                                                                                                                                               Best Loca
Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               RESULT 222
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ADL34663
      888888888888888
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   셤
                                                                                                                                                                                                                                                                                                                                                                          8
```

```
This invention describes a novel antisense oligonucleotides which specifically hybridises to and inhibits the expression of human phosphoinositide-3-kinase, regulatory subunit 4, piso. The phosphoinositide-3-kinase at least one modified internucleoside linkage, preferably a phosphorothioate linkage. It also comprises at least one modified sugar molety, preferably a 2'-O-methoxyethyl sugar molety. The antisense oligonucleotide further comprises at least one modified nucleobase, preferably a 5-methylcytosine. The antisense oligonucleotide further comprises at least one modified nucleobase, preferably a 5-methylcytosine. The antisense oligonucleotide further comprises at least one modified nucleobase, preferably a 5-methylcytosine. The antisense oligonucleotide further comprises at least one molified nucleobase, preferably e.g. to or comprise and size research reagents and kits. It can also be used prophylactically, e.g. to prevent or delay infection, inflammation or tumour formation. It can also be used to treat a disease or condition associated with phosphoinositide-3-kinase, regulatory subunit 4, pls0, e.g. hyperproliferative disorder, preferably cancer, chediak-Higashi syndrome or a metabolic disorder. The products of the invention are immunomodulators with cytostatic activity and can be used
                                                                                                                                                                                                                                                                     ö
       treat a disease
                   or condition associated with phosphoinositide-3-kinase, regulatory subunit 4, p150, e.g. hyperproliferative disorder, preferably cancer, Chediak-Higashi syndrome or a metabolic disorder. The products of the invention are immunomodulators with cytostatic activity and can be used
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           antisense; inhibitor; hybridisation; human; phosphoinositide-3-kinase; regulatory subunit 4; p150; internucleoside linkage; phosphorothioate linkage; 2'-O-methoxyethyl sugar; 5-methylcytosine; infection; inflammation; tumour formation; hyperproliferative disorder; cancer; Chediak-Higashi syndrome; metabolic disorder; immunomodulator;
                                                                                                                                                                                                                                                                     Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Phosphoinositide-3-kinase regulatory subunit 4 p150 fragment 124626.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                New antisense compound targeted to a nucleic acid molecule encoding phosphoinositide-3-kinase, regulatory subunit 4, p150, useful for treating cancer, Chediak-Higashi syndrome or a metabolic disorder.
                                                                                                                                                                                                                                                                  .,
                                                                                                                                                                                                          Query Match 0.4%; Score 20; DB 1; Length 20; Best Local Similarity 100.0%; Pred. No. 1.4e+02; Matches 20; Conservative 0; Mismatches 0; Indels
  can also be used to
                                                                                                                                                                Sequence 20 BP; 9 A; 4 C; 6 G; 1 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Example 15; SEQ ID NO 112; 60pp; English.
inflammation or tumour formation. It
                                                                                                                                                                                                                                                                                                          1658 AAAAAGCCGAAGGAGAGCCT 1677
                                                                                                                                                                                                                                                                                                                                                        1 AAAAGCCGAAGGAGGCCT 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            멾
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 cytostatic; gene therapy; ds.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     18-SEP-2003; 2003US-00667022.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      31-MAY-2002; 2002US-00160786.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ADL34666 standard; DNA; 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Freier SM, Dobie KW;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    WPI; 2004-282523/26.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                (FREI/) FREIER S M. (DOBI/) DOBIE K W.
                                                                                                                   for gene therapy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               US2004063657-A1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     17-JUN-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           01-APR-2004.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ADL34666;
                                                                                                                                                                                                                                                                                                                                                                                                                           RESULT 223
85999955538
                                                                                                                                                                                                                                                                                                                                                   엄
                                                                                                                                                                                                                                                                                                          8
```

```
This invention describes a novel antisense oligonucleotides which specifically hybridises to and inhibits the expression of human to phosphoinositide-3 kinase, regulatory subunit 4, p150. The oligonucleotides comprises at least one modified internucleoside linkage, oligonucleotides comprises at least one modified internucleoside linkage, preferably a phosphorothioate linkage. It also comprises at least one modified antisense oligonucleotide further comprises at least one modified antisense oligonucleotide further comprises at least one modified antisense oligonucleotide can be used in diagnostics and as research reagents and kits. It can also be used prophylactically, e.g. to prevent or delay infection, inflammation or tumour formation. It can also be used to treat a disease condition associated with phosphoinositide-3-kinase, regulatory subunit 4, p150, e.g. hyperproliferative disorder, preferably cancer, chediak-Higashi syndrome or a metabolic disorder. The products of the invention are immunomodulators with cytostatic activity and can be used
                                                                                                               ó
                                                                                                                                                                                                                                                                                                                                                                                                                          antisense; inhibitor; hybridisation; human; phosphoinositide-3-kinase; regulatory subunit 4; p150; internucleoside linkage; phosphorothioate linkage; 2'-O-methoxyethyl sugar; 5-methylcytosine; infection; inflammation; thomour formation; hyperproliferative disorder; cancer; Chediak-Higashi syndrome; metabolic disorder; immunomodulator;
                                                                                                               Gaps
                                                                                                                                                                                                                                                                                                                                                                                         Phosphoinositide-3-kinase regulatory subunit 4 p150 fragment 124635.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 New antisense compound targeted to a nucleic acid molecule encoding phosphoinositide-3-kinase, regulatory subunit 4, p150, useful for treating cancer, Chediak-Higashi syndrome or a metabolic disorder.
                                                                                                               ö
                                                                          Length 20;
                                                                                                             0; Indels
                                                                        DB 1; Le
                                     Sequence 20 BP; 5 A; 5 C; 5 G; 5 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Sequence 20 BP; 3 A; 9 C; 5 G; 3 T; 0 U; 0 Other;
                                                                                                             Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Example 15; SEQ ID NO 121; 60pp; English.
                                                                        Score 20;
Pred. No.
                                                                                                                                              2041 ACAGCTCTGAGATTCCTGGA 2060
                                                      0.4%; Scc.
100.0%; Pred
0; M
                                                                                                                                                                                    1 ACAGCTCTGAGATTCCTGGA 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            cytostatic; gene therapy; ds.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           18-SEP-2003; 2003US-00667022.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                31-MAY-2002; 2002US-00160786.
                                                                                                                                                                                                                                                                              ADL34675 standard; DNA; 20
                                                                                                                                                                                                                                                                                                                                                      17-JUN-2004 (first entry)
                                                                                                             Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Freier SM, Dobie KW;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            WPI; 2004-282523/26.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    (FREI/) FREIER S M.
                                                                                          Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       (DOBI/) DOBIE K W.
for gene therapy.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  for gene therapy.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   US2004063657-A1.
                                                                  Query Match
Best Local Simi
Matches 20; (
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        01-APR-2004.
                                                                                                                                                                                                                                                                                                                   ADL34675;
                                                                                                                                                                                                                                            RESULT 224
                                                                                                                                                                                                                                                                                               SXS
                                                                                                                                                                                  ద
                                                                                                                                                ð
```

DB 1; Length 20;

Score 20;

0.48;

Query Match

```
This invention describes a novel antisense oligonucleotides which specifically hybridies to and inhibits the expression of human phosphoinositide-3-kinase, regulatory subunit 4, piso. The oligonucleotides comprises at least one modified internucleoside linkage, preferably a phosphorothioate linkage. It also comprises at least one modified antisense oligonucleotide further comprises at least one modified nucleobase, preferably a 5-methylcytosine. The antisense oligonucleotide further comprises at least one modified nucleobase, preferably a 5-methylcytosine. The antisense oligonucleotide further comprises at least one modified nucleobase, preferably e.g. to a comprise of the condition or tumour formation. It can also be used prophylactically, e.g. to prevent or delay infection, inflammation or tumour formation. It can also be used to treat a disease or condition associated with phosphoinositide-3-kinase, regulatory condition associated with phosphoinositide-3-kinase, regulatory chediak-Higashi syndrome or a metabolic disorder. The products of the formation are immunomodulators with cytostatic activity and can be used
                           ö
                                                                                                                                                                                                                                                                                                                                                                    antisense; inhibitor; hybridisation; human; phosphoinositide-3-kinase; regulatory subunit 4; p150; internucleoside linkage; phosphorothicote linkage; 2'-0-methoxyethyl sugar; 5-methylcytosine; infection; inflammation; tumour formation; hyperproliferative disorder; cancer; Chediak Higashi syndrome; metabolic disorder; immunomodulator; cytostatic; gene therapy; ds.
                           Gaps
                                                                                                                                                                                                                                                                                                                                Phosphoinositide-3-kinase regulatory subunit 4 p150 fragment 124641.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    New antisense compound targeted to a nucleic acid molecule encoding phosphoinositide-3-kinase, regulatory subunit 4, p150, useful for treating cancer, Chediak-Higashi syndrome or a metabolic disorder.
                           ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Query Match 0.4%; Score 20; DB 1; Length 20; Best Local Similarity 100.0%; Pred. No. 1.4e+02; Matches 20; Conservative 0; Mismatches 0; Indels
                         Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Sequence 20 BP; 8 A; 4 C; 3 G; 5 T; 0 U; 0 Other;
Pred. No. 1.4e+02; 
; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Example 15; SEQ ID NO 127; 60pp; English.
                                                             2843 GCCCTCGGCCAGAGGATCCT 2862
                                                                                                     20
  100.0%; Protive 0; 1
                                                                                                     1 GCCTCCGCCAGAGGATCCT
                                                                                                                                                                                                         ADL34681 standard; DNA; 20 BP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              18-SEP-2003; 2003US-00667022.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    31-MAY-2002; 2002US-00160786
                                                                                                                                                                                                                                                                                          (first entry)
                       Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Freier SM, Dobie KW;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              WPI; 2004-282523/26.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        (FREI/) FREIER S M. (DOBI/) DOBIE K W.
    Best Local Similarity
Matches 20; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         for gene therapy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             US2004063657-A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Homo sapiens
                                                                                                                                                                                                                                                                                          17-JUN-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     01-APR-2004.
                                                                                                                                                                                                                                                  ADL34681;
                                                                                                                                                                   RESULT 225
                                                                                                                                                                                    셤
                                                               à
```

```
This invention describes a novel antisense oligonucleotides which specifically hybridises to and inhibits the expression of human phosphoinositide-3-kinase, regulatory subunit 4, p150. The coligonucleotides comprises at least one modified internucleoside linkage, preferably a phosphorothioate linkage. It also comprises at least one modified sugar modety, preferably a 2'-O-methoxyethyl sugar modety. The antisense oligonucleotide further comprises at least one modified nucleobase, preferably a 5-methylcytosine. The antisense oligonucleotide can be used in diagnostics and as research reagents and kits. It can also be used prophylactically, e.g. to prevent or delay infection, inflammation or tumour formation. It can also be used to treat a disease or condition associated with phosphoinositide-3-kinase, regulatory subunit 4, p150, e.g. hyperprofiferative disorder, preferably cancer, chediak-Higashi syndrome or a metabolic disorder. The products of the invention are immunomodulators with cytostatic activity and can be used
                                                                                                                                                                                                                                                      antisense; inhibitor; hybridisation; human; phosphoinositide-3-kinase; regulatory subunit 4; p150; internucleoside linkage; phosphorothioate linkage; 2'-O-methoxyethyl sugar; 5-methylcytosine; infection; inflammation; tumour formation; hyperproliferative disorder; cancer; Chedlak-Higashi syndicme; metabolic disorder; immunomodulator; cytostatic; gene therapy; ds.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Gaps
                                                                                                                                                                                                                      Phosphoinositide-3-kinase regulatory subunit 4 p150 fragment 124646.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    New antisense compound targeted to a nucleic acid molecule encoding phosphoinositide-3-kinase, regulatory subunit 4, p150, useful for treating cancer, Chediak-Higashi syndrome or a metabolic disorder.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  0.4%; Score 20; DB 1; Length 20;
100.0%; Pred. No. 1.4e+02;
iive 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Sequence 20 BP; 4 A; 4 C; 7 G; 5 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Example 15; SEQ ID NO 132; 60pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    3504 GCGTCCTAAAGGGCTGTTAG 3523
1 AAAACCAGTAATACCGGTTT 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1 GCGTCCTAAAGGGCTGTTAG 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 18-SEP-2003; 2003US-00667022
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       31-MAY-2002; 2002US-00160786.
                                                                                                ADL34686 standard; DNA; 20
                                                                                                                                                                                17-JUN-2004 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Best Local Similarity 100.
Matches 20; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Dobie KW;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                WPI; 2004-282523/26.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               (FREI/) FREIER S M.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    DOBIE K W.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        for gene therapy
                                                                                                                                                                                                                                                                                                                                                                                                                                                 US2004063657-A1
                                                                                                                                                                                                                                                                                                                                                                                                           Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         01-APR-2004.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Freier SM,
                                                                                                                                        ADL34686;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    (DOBI/)
                                                                                                     셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ò
```

Gaps

ö

ö

3318 AAAACCAGTAATACCGGTTT 3337

ADL34694;

```
This invention describes a novel antisense oligonucleotides which specifically hybridises to and inhibits the expression of human specifically hybridises to and inhibits the expression of human compositions titled "A title". The phosphornositied at least one modified internucleoside linkage, oligonucleotides comprises at least one modified sugar moiety, preferably a 2'-O-methoxyethyl sugar moiety. The modified sugar moiety, preferably a 2'-O-methoxyethyl sugar moiety. The moistied sugar moiety, preferably a 2'-O-methoxyethyl sugar moiety. The nucleobase, preferably a service at least one modified considered prophylactically, e.g. to prevent or delay infection, can be used in diagnostics and as research reagents and kits. It can also be used prophylactically, e.g. to prevent or delay infection, condition associated with phosphoinositide-3-kinase, regulatory or condition associated with phosphoinositide-3-kinase, regulatory condition associated with phosphoinositide-3-kinase, regulatory condition are immunomodulators with cytostatic activity and can be used invention are immunomodulators with cytostatic activity and can be used
                                           antisense; inhibitor; hybridisation; human; phosphoinositide-3-kinase; regulatory subunit 4; p150; internucleoside linkage; phosphorothioate linkage; 2'-O-methoxyetehyl sugar; 5-methylcytosine; infection; inflammation; tumour formation; hyperproliferative disorder; cancer; Chediak-Higashi syndrome; metabolic disorder; immunomodulator; cytostatic; gene therapy; ss; primer.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      New antisense compound targeted to a nucleic acid molecule encoding phosphoinositide-3-kinase, regulatory subunit 4, p150, useful for treating cancer, Chediak-Higashi syndrome or a metabolic disorder.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sequence 20 BP; 6 A; 8 C; 2 G; 4 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                /mod_base= OTHER
/note= "phosphorothioate backbone"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      100.0%; Pred. No. 1.4e+02; tive 0; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    0.4%; Score 20; DB 1;
       ISIS antisense oligonucleotide ISIS 206978.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Example 15; SEQ ID NO 32; 60pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1299 AGGTTGTGTGATAGCTGAGC 1318
                                                                                                                                                                                                                                                                            Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                20 AGGTTGTGTGATAGCTGAGC 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                31-MAY-2002; 2002US-00160786.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     18-SEP-2003; 2003US-00667022
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ADL34589 standard; DNA; 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Query Match
Best Local Similarity 100.0
These 20; Conservative
                                                                                                                                                                                                                                                                                                                               ď
                                                                                                                                                                                                                                                                                                        ...20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Dobie KW;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     WPI; 2004-282523/26.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   (FREI/) FREIER S M. (DOBI/) DOBIE K W.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              for gene therapy
                                                                                                                                                                                                                                                                                                                                                                                                                            US2004063657-A1
                                                                                                                                                                                                                                                                                                          modified base
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             01-APR-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Freier SM,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ADL34589
                                                                                                                                                                                                                                      Synthetic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 RESULT 229
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ADL34589/
ID ADL3
XX
AC ADL3
g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            This invention describes a novel antisense oligonucleotides which specifically hybridises to and inhibits the expression of human phosphoinositide 3. Attanse, regulatory subunit 4, p150. The phosphoinositide 3. Attantocomparises at least one modified internucleoside linkage, oligonucleotides comprises at least to mendified internucleoside linkage, preferably a phosphorothioate linkage. It also comprises at least one modified modified sugar moiety, preferably a 2-0-methoxyethyl sugar moiety. The modified sugar moiety, preferably a 5-methylcytosine. The antisense oligonucleotide further comprises at least one modified undechabed, preferably a 5-methylcytosine. The antisense oligonucleotide can be used prophylactically, e.g. to prevent or delay infection, be used prophylactically, e.g. to prevent or delay infection, or condition associated with phosphoinositide-3. Kinase, regulatory subunit 4, p150, e.g. hyperproliferative disorder, preferably cancer, chediak-Higashi syndrome or a metabolic disorder. The products of the invention are immunomodulators with cytostatic activity and can be used
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ö
                                                                                                                                                                                      antisense; inhibitor; hybridisation; human; phosphoinositide-3-kinase; regulatory subunit 4; p150; internucleoside linkage; phosphorothioate linkage; 2'-O-methoxyethyl sugar; 5-methylcytosine; infection; inflammation; tumour formation; hyperproliferative disorder; cancer; Chediak-Higashi syndrome; metabolic disorder; immunomodulator; cytostatic; gene therapy; ds.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Gaps
                                                                                                                                             Phosphoinositide-3-kinase regulatory subunit 4 p150 fragment 124661.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      New antisense compound targeted to a nucleic acid molecule encoding phosphoinositide-3-kinase, regulatory subunit 4, p150, useful for treating cancer, Chediak-Higashi syndrome or a metabolic disorder.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Length 20;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1.4e+02;
les 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Sequence 20 BP; 6 A; 5 C; 5 G; 4 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  0.4%; Score 20; DB 1;
00.0%; Pred. No. 1.4e+02
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      100.0%; Prec. ...
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Example 15; SEQ ID NO 140; 60pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  4309 AGTCCTGCAGATGGAAATCC 4328
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1 AGTCCTGCAGATGGAAATCC 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ADL34586 standard; DNA; 20 BP
          ADL34694 standard; DNA; 20 BP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                31-MAY-2002; 2002US-00160786.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   18-SEP-2003; 2003US-00667022.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  17-JUN-2004 (first entry)
                                                                                                            (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Freier SM, Dobie KW;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  WPI; 2004-282523/26.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                (FREI/) FREIER S M. (DOBI/) DOBIE K W.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Query Match
Best Local Similarity
Matches 20; Conser
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           for gene therapy
                                                                                                                                                                                                                                                                                                                                                                                                                       US2004063657-A1.
                                                                                                                                                                                                                                                                                                                                                                            Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          01-APR-2004.
                                                                                                            17-JUN-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ADL34586
```

ö

Gaps

ö

ADL34586,

g ሯ

SXXXE

Length 20; 0; Indels

```
ISIS antisense oligonucleotide ISIS 206993.
               17-JUN-2004 (first entry)
  à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           This invention describes a novel antisense oligonucleotides which specifically hybridises to and inhibits the expression of human phosphoinositide-3-kinase, regulatory subunit 4, piso. The phosphoinositide-3-kinase at least one modified internucleoside linkage, preferably a phosphorothioate linkage. It also comprises at least one modified sugar molety, preferably a 2-O-methoxyethy sugar molety. The antisense oligonucleotide further comprises at least one modified nucleobase, preferably a 5-methylcytosine. The antisense oligonucleotide further comprises at least one modified nucleobase, preferably a 5-methylcytosine. The antisense oligonucleotide in inagnostics and as research reagents and kits. It can also be used prophylactically, e.g. to prevent or delay infection, inflammation or tumour formation. It can also be used to treat a disease or condition associated with phosphoinositide-3-kinase, regulatory cubunit 4, piso, e.g. hyperproliferative disorder, preferably cancer, chediak-Higashi syndrome or a metabolic disorder. The products of the invention are immunomodulators with cytostatic activity and can be used
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ö
                                                  antisense; inhibitor; hybridisation; human; phosphoinositide-3-kinase; regulatory subunit 4; p150; internucleoside linkage; phosphorothioate linkage; 2'-O-methoxyethyl sugar; 5-methylcytosine; infection; inflammation; tumour formation; hyperproliferative disorder; cancer; Chediak-Higashi syndrome; metabolic disorder; immunomodulator; cytostatic; gene therapy; ss; primer.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                New antisense compound targeted to a nucleic acid molecule encoding phosphoinositide-3-kinase, regulatory subunit 4, p150, useful for treating cancer, Chediak-Higashi syndrome or a metabolic disorder.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ô
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         0.4%; Score 20; DB 1; Length 20; 100.0%; Pred. No. 1.4e+02; tive 0; Mismatches 0; Indels
                                                                                                                                                                                                                                  /note= "phosphorothioate backbone"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sequence 20 BP; 4 A; 5 C; 6 G; 5 T; 0 U; 0 Other;
                          ISIS antisense oligonucleotide ISIS 206981.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Example 15; SEQ ID NO 35; 60pp; English.
                                                                                                                                                                           Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1441 CAGATGATTCACCGTGAGCC 1460
                                                                                                                                                                                         1. .20
/*tag= a
/mod base= OTHER
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  20 CAGATGATTCACCGTGAGCC 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ADL34601 standard; DNA; 20 BP
                                                                                                                                                                                                                                                                                                                                          31-MAY-2002; 2002US-00160786
                                                                                                                                                                                                                                                                                                               18-SEP-2003; 2003US-00667022
(first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Matches 20; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                             Freier SM, Dobie KW;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                        WPI; 2004-282523/26.
                                                                                                                                                                                                                                                                                                                                                                    (FREI/) FREIER S M.
                                                                                                                                                                                                                                                                                                                                                                                   (DOBI/) DOBIE K W.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         for gene therapy
                                                                                                                                                                                                                                                           US2004063657-A1
                                                                                                                                                                            Key
modified_base
17-JUN-2004
                                                                                                                                                                                                                                                                                      01-APR-2004.
                                                                                                                                                 Synthetic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ADL34601
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   RESULT 230
ADL34601/c
ID ADL346
XX
AC ADL346
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        요
ò
```

```
This invention describes a novel antisense oligonucleotides which specifically hybridises to and inhibits the expression of human phosphoinositide3-*timase, regulatory subunit 4, p150. The phosphoinositide4-*timase, regulatory subunit 4, p150. The coligonucleotides comprises at least one modified internucleoside linkage, preferably a phosphorothioate linkage. It also comprises at least one modified sugar molety, preferably a 2'-O-methoxyethyl sugar molety. The antisense oligonucleotide further comprises at least one modified nucleobase, preferably a 5-methylcytosine. The antisense oligonucleotide can be used in diagnostics and as research reagents and kits. It can also be used prophylactically, e.g. to prevent or delay infection, inflammation or tumour formation. It can also be used to treat a disease or condition associated with phosphoinositide-3-kinase, regulatory subunit 4, p150, e.g. hyperproliferative disorder, preferably cancer, chediak-Higashi syndrome or a metabolic disorder. The products of the invention are immunomodulators with cytostatic activity and can be used
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ö
antisense; inhibitor; hybridisation; human; phosphoinositide-3-kinase; regulatory subunit 4; p150; internucleoside linkage; phosphorchioace linkage; 2'-O-methoxyethyl sugar; 5-methylcytosine; infection; inflammation; tumour formation; hyperproliferative disorder; cancer; Chediak-Higashi syndrome; metabolic disorder; immunomodulator; cytostatic; gene therapy; ss; primer.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Gарв
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             New antisense compound targeted to a nucleic acid molecule encoding phosphoinositide-3-kinase, regulatory subunit 4, p150, useful for treating cancer, Chediak-Higashi syndrome or a metabolic disorder.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            0.4%; Score 20; DB 1; Length 20;
100.0%; Pred. No. 1.4e+02;
tive 0; Mismatches 0; Indele
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                /note= "phosphorothioate backbone"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Sequence 20 BP; 4 A; 5 C; 6 G; 5 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Example 15; SEQ ID NO 47; 60pp; English.
                                                                                                                                                                                                                                                                                                                                               Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        2391 TGGCTGGCAAAGCTCCTCAA 2410
                                                                                                                                                                                                                                                                                                                                                                                                                                                             /mod_base= OTHER
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ADL34624 standard; DNA; 20 BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         31-MAY-2002; 2002US-00160786.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               18-SEP-2003; 2003US-00667022
                                                                                                                                                                                                                                                                                                                                                                                          1. .20
/*tag= a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Local Similarity 100.
nes 20; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Dobie KW;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           WPI; 2004-282523/26.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   (FREI/) FREIER S M.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      (DOBI/) DOBIE K W.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               for gene therapy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              JS2004063657-A1
                                                                                                                                                                                                                                                                                                                                                                                   modified_base
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        01-APR-2004.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Freier SM,
                                                                                                                                                                                                                                                                             Synthetic.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ADL34624/c
ID ADL346
XX
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            RESULT 231
```

(first entry)

```
ISIS antisense oligonucleotide ISIS 207036.
                                                        17-JUN-2004
                    ADL34636;
This invention describes a novel antisense oligonucleotides which specifically hybridises to and inhibits the expression of human specifically hybridises to and inhibits the expression of human phosphoinositide—3 kinase, regulatory subunit 4, p150. The phosphoinositide of antises at least one modified internucleoside linkage, or antisense oligonucleotide further comprises at least one modified sugar moiety, preferably a 2.-0-methoxyethyl sugar moiety. The modified sugar moiety preferably a 2.-0-methoxyethyl sugar moiety. The nucleobase, preferably a S-methylycytosine. The antisense oligonucleotide can be used in diagnostics and as research reagents and kits. It can also be used prophylactically, e.g. to prevent or delay infection, inflammation or tumour formation. It can also be used to treat a disease or condition associated with phosphoinositide—3-kinase, regulatory can subunit 4, p150, e.g. hyperproliferative disorder, preferably cancer, chediak-Higashi syndrome or a metabolic disorder. The products of the invention are immunomodulators with cytostatic activity and can be used
                                                                                                            antisense; inhibitor; hybridisation; human; phosphoinositide-3-kinase; regulatory subunit 4; p150; internucleoside linkage; methylcytosine; phosphorothioate linkage; 2'-O-methoxyethyl sugar; 5-methylcytosine; infection; inflammation; tumour formation; hyperproliferative disorder; cancer; Chediak-Higashi syndrome; metabolic disorder; immunomodulator; cytostatic; gene therapy; ss; primer.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            New antisense compound targeted to a nucleic acid molecule encoding phosphoinositide-3-kinase, regulatory subunit 4, p150, useful for treating cancer, Chediak-Higashi syndrome or a metabolic disorder.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             DB 1; Length 20;
1.4e+02;
                                                                                                                                                                                                                                                                                                                                                                    /note= "phosphorothioate backbone"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Sequence 20 BP; 8 A; 4 C; 6 G; 2 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             0.4%; Score 20; DB
100.0%; Pred. No. 1.4
:ive 0; Mismatches
                                                                                ISIS antisense oligonucleotide ISIS 207024.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Example 15; SEQ ID NO 70; 60pp; English.
                                                                                                                                                                                                                                                                                              Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                      /mod_base= OTHER
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            31-MAY-2002; 2002US-00160786.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        18-SEP-2003; 2003US-00667022.
                                                                                                                                                                                                                                                                                                                  ...20
*tag= a
                                                (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Local Similarity 100.
Les 20; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Freier SM, Dobie KW;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                WPI; 2004-282523/26.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  (FREI/) FREIER S M. (DOBI/) DOBIE K W.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       for gene therapy
                                                                                                                                                                                                                                                                                                                                                                                                                  US2004063657-A1.
                                                                                                                                                                                                                                                                                                                    modified base
                                                17-JUN-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                      01-APR-2004
                                                                                                                                                                                                                                                            Synthetic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Query Match
              ADL34624;
```

```
This invention describes a novel antisense oligonucleotides which specifically hybridises to and inhibits the expression of human phosphoinositide-3-kinase, regulatory subunit 4, p150. The phosphoinositide-3-kinase, regulatory subunit 4, p150. The phosphoinositide comprises at least one modified internucleoside linkage, cligonucleotides at least to modified sugar moiety, preferably a 2'-O-methoxyethyl sugar moiety. The modified sugar moiety, preferably a 2'-O-methoxyethyl sugar moiety. The modified sugar moiety, preferably a 2'-O-methoxyethyl sugar moiety. The modified sugar moiety as a least one modified can be used in diagnostics and as research reagents and kits. It can also be used in diagnostics and as research reagents and kits. It can also can be used in diagnostically, e.g. to prevent or delay infection, inflammation or tumour formation. It can also be used to treat a disease or condition associated with phosphoinositide-3-kinase, regulatory condition associated with phosphoinositide-3-kinase, regulatory subunit 4, p150, e.g. hyperproliferative disorder. The products of the invention are immunomodulators with cytostatic activity and can be used
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ö
antisense; inhibitor; hybridisation; human; phosphoinositide-3-kinase; regulatory subunit 4; p150; internucleoside linkage; phosphorothioate linkage; 2'-O-methoxyethyl sugar; 5-methylcytosine; infection; inflammation; tumour formation; hyperproliferative disorder; cancer; Chediak-Higashi syndrome; metabolic disorder; immunomodulator;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      New antisense compound targeted to a nucleic acid molecule encoding phosphoinositide-3-kinase, regulatory subunit 4, p150, useful for treating cancer, Chediak-Higashi syndrome or a metabolic disorder.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Score 20; DB 1; Length 20;
Pred. No. 1.4e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                              /mod_base= OTHER
/note= "phosphorothioate backbone"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Sequence 20 BP; 6 A; 4 C; 6 G; 4 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Match
Local Similarity 100.0%; Pred. NO. 1...
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Example 15; SEQ ID NO 82; 60pp; English.
                                                                                                                                                                                                     cytostatic; gene therapy; ss; primer
                                                                                                                                                                                                                                                                                                                                       Location/Qualifiers
1. 20
/*tag= a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          4424 CATCTGTGTCTACTACAGG 4443
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         18-SEP-2003; 2003US-00667022
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     31-MAY-2002; 2002US-00160786.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Dobie KW;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    WPI; 2004-282523/26.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 (FREI/) FREIER S M.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       (DOBI/) DOBIE K W.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               for gene therapy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               US2004063657-A1.
                                                                                                                                                                                                                                                                                                                                                          Key
modified_base
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    01-APR-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Freier SM,
                                                                                                                                                                                                                                                                                  Synthetic.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Matches
```

20 CATCTGTGTCCTACTACAGG 1

셤 ò

; 0

0; Gaps

0; Indels

TTCTTGCCTATGCCACTGTG 3918

3899

ઠે g

Matches

rrcrreccrareccacrere 1

ADL34636 standard; DNA; 20 BP.

RESULT 232

ADL34636/ ID ADL3

RESULT 233 ADL34689

gibbs-10-667-022-4.rng

ADL34689

Homo

```
This invention describes a novel antisense oligonucleotides which specifically hybridises to and inhibits the expression of human phosphoinositides. As tinase, regulatory subunit 4, pls0. The oligonucleotides comprises at least one modified internucleoside linkage, preferably a phosphorothioate linkage. It also comprises at least one modified sugar moievy, preferably a 2'-O-methoxyethyl sugar moiety. The antisense oligonucleotide further comprises at least one modified nucleobase, preferably a 5-methylcycosine. The antisense oligonucleotide further comprises at least one modified can be used in diagnostics and as research reagents and kits. It can also be used prophylactically, e.g. to prevent or delay infection,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      inflammation or tumour formation. It can also be used to treat a disease or condition associated with phosphoinositide-3-kinase, regulatory subunit 4, pl50, e.g. hyperproliferative disorder, preferably cancer, Chediak-Higashi syndrome or a metabolic disorder. The products of the
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Chediak-Higashi syndrome or a metabolic disorder. The products of the invention are immunomodulators with cytostatic activity and can be used
                                                                           antisense; inhibitor; hybridisation; human; phosphoinositide-3-kinase; regulatory subunit 4; p150; internucleoside linkage; pnosphorothioate linkage; 2'-O-methoxyethyl sugar; 5-methylcytosine; infection; inflammation; tumour formation; hyperproliferative disorder cancer; Chediak-Higashi syndrome; metabolic disorder; immunomodulator;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              antieense; inhibitor; hybridisation; human; phosphoinositide-3-kinase; regulatory subunit 4; p150; internucleoside linkage;
                            Phosphoinositide-3-kinase regulatory subunit 4 p150 fragment 124657.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           New antisense compound targeted to a nucleic acid molecule encoding
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       phosphoinositide-3-kinase, regulatory subunit 4, p150, useful for
treating cancer, Chediak-Higashi syndrome or a metabolic disorder.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      0.4%; Score 20; DB 1; Length 20; 100.0%; Pred. No. 1.4e+02; tive 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Seguence 20 BP; 3 A; 4 C; 7 G; 6 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ISIS antisense oligonucleotide ISIS 206983.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Example 15; SEQ ID NO 139; 60pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          4166 TGATTGCAGCTGTTCAGGGC 4185
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 rdarrecaecrerrcaeeec
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ADL34591 standard; DNA; 20 BP
                                                                                                                                                                                                                                                                                                                                                                                                                                                 18-SEP-2003; 2003US-00667022.
                                                                                                                                                                                                                           cytostatic; gene therapy; ds
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     31-MAY-2002; 2002US-00160786
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   17-JUN-2004 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   20; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Freier SM, Dobie KW;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    WPI; 2004-282523/26.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         (FREI/) FREIER S M.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         (DOBI/) DOBIE K W.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    for gene therapy
                                                                                                                                                                                                                                                                                                                                   JS2004063657-A1
                                                                                                                                                                                                                                                                                  Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                          01-APR-2004.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ADL34591;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         This invention describes a novel antisense oligonucleotides which specifically hybridises to and inhibits the expression of human phosphoinositide. Finase, regulatory subunit 4, p150. The oligonucleotides comprises at least one modified internucleoside linkage, referably a phosphorothioate linkage. It also comprises at least one modified modified sugar molety, preferably a 2.0-methoxyethyl sugar molety. The antisense oligonucleotide further comprises at least one modified nucleobase, preferably a 5-methylcytosine. The antisense oligonucleotide further comprises at least one modified nucleobase, preferably a 5-methylcytosine. The antisense oligonucleotide further comprises at least one modified nucleobase, preferably a 5-methylcytosine. The antisense oligonucleotide further comprises at least one modified nucleobase, preferably e.g. to prevent or delay infection, inflammation or tumour formation. It can also be used to treat a disease or condition associated with phosphoinositide. 3-kinase, regulatory chediak-Higashi syndrome or a metabolic disorder, preferably cancer, chediak-Higashi syndrome or a metabolic disorder. The products of the invention are immunomodulators with cytostatic activity and can be used
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ö
                                                                                                                                                                                                                antisense; inhibitor; hybridisation; human; phosphoinositide-3-kinase; regulatory subunit 4; p150; internucleoside linkage; phosphorothioare linkage; 2'-O-methoxysthyl sugar; 5-methylcytosine; infection; inflammation; tumour formation; hyperproliferative disorder; cancer; Chediak-Higashi syndrome; metabolic disorder; immunomodulator;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Gaps
                                                                                                                                                              Phosphoinositide-3-kinase regulatory subunit 4 p150 fragment 124650.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                New antisense compound targeted to a nucleic acid molecule encoding phosphoinositide-3-kinase, regulatory subunit 4, p150, useful for treating cancer, Chediak-Higashi syndrome or a metabolic disorder.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Length 20;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Sequence 20 BP; 3 A; 4 C; 5 G; 8 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 0.4%; Score 20; DB 1; Le
100.0%; Pred. No. 1.4e+02;
ive 0; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Example 15; SEQ ID NO 135; 60pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               3762 TGTCCAGCTTCTTGGAATTG 3781
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1 TGTCCAGCTTCTTGGAATTG 20
BP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ADL34693 standard; DNA; 20 BP
                                                                                                                                                                                                                                                                                                                                                             cytostatic, gene therapy, ds.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      18-SEP-2003; 2003US-00667022.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          31-MAY-2002; 2002US-00160786.
ADL34689 standard; DNA; 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              (first entry)
                                                                                                          (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Freier SM, Dobie KW;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         WPI; 2004-282523/26.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 (FREI/) FREIER S M. (DOBI/) DOBIE K W.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            for gene therapy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           JS2004063657-A1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           17-JUN-2004
                                                                                                          17-JUN-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               01-APR-2004.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           20;
```

ö

Gaps

ö

ADL34693;

ADL34693 ID ADL3 XX AC ADL3 XX DT 17-J

RESULT 234

셤 ò

Query Match Local

Matches

```
This invention describes a novel antisense oligonucleotides which specifically hybridises to and inhibits the expression of human specifically hybridises to and inhibits the expression of human conspicied. 3-kinase, regulatory subunit 4, p150. The phosphoinositide—3-kinase, regulatory subunit 4, p150. The coligonucleotides comprises at least one modified internucleoside linkage. It also comprises at least one modified sugar moiety, preferably a 2-O-methoxyethyl sugar moiety. The modified sugar moiety, preferably a 2-O-methoxyethyl sugar moiety. The nucleobase, preferably a 5-methylycosine. The antisense oligonucleotide nucleobase, preferably a semethylycosine. The antisense oligonucleotide can be used in diagnostics and as research reagents and kits. It can also be used to treat a disease inflammation or tumour formation. It can also be used to treat a disease or condition associated with phosphoinositide—3-kinase, regulatory condition associated with phosphoinositide—3-kinase, regulatory can be used with an methodic disorder, preferably cancer, chediak-Higashi syndrome or a metabolic disorder. The products of the invention are immunomodulators with cytostatic activity and can be used
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ö
phosphorothioate linkage; 2'-O-methoxyethyl sugar; 5-methylcytosine; infection; inflammation; tumour formation; hyperproliferative disorder; cancer; Chediak-Higashi syndrome; metabolic disorder; immunomodulator; cytostatic; gene therapy; ss; primer.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   antisense; inhibitor; hybridisation; human; phosphoinositide-3-kinase;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     New antisense compound targeted to a nucleic acid molecule encoding phosphoinositide-3-kinase, regulatory subunit 4, p150, useful for treating cancer, Chediak-Higashi syndrome or a metabolic disorder.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    0.4%; Score 20; DB 1; Length 20;
100.0%; Pred. No. 1.4e+02;
tive 0; Mismatches 0; Indels
                                                                                                                                                                                                                'note= "phosphorothioate backbone"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Sequence 20 BP; 9 A; 1 C; 4 G; 6 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ISIS antisense oligonucleotide ISIS 206986.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Example 15; SEQ ID NO 37; 60pp; English.
                                                                                                                                          Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1513 TITCCTGAAATATTTTACAC 1532
                                                                                                                                                            |. .20
|*tag= a
|mod_base= OTHER
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TTTCTGAATATTTTACAC 1
                                                                                                                                                                                                                                                                                                                                                                        31-MAY-2002; 2002US-00160786.
                                                                                                                                                                                                                                                                                                                                  18-SEP-2003; 2003US-00667022.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ADL34594 standard; DNA; 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     17-JUN-2004 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Freier SM, Dobie KW;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             WPI; 2004-282523/26.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                              (FREI/) FREIER S M. (DOBI/) DOBIE K W.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      for gene therapy
                                                                                                                                                                                                                                                              US2004063657-A1.
                                                                                                                                                                modified_base
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    20;
                                                                                                                                                                                                                                                                                                01-APR-2004.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            20
                                                                                                          Synthetic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Best Loca
Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    RESULT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            EXEXEXEX
            à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              셤
```

```
This invention describes a novel antisense oligonucleotides which specifically hybridises to and inhibits the expression of human phosphoinositide 3-kinase, regulatory subunit 4, p160. The phosphoinositide 3-kinase, regulatory subunit 4, p160. The coligonucleotides comprises at least come modified internucleoside linkage, cartisense modety, preferably a 2'-O-methoxyethyl sugar moiety. The modified sugar moiety, preferably a 2'-O-methoxyethyl sugar moiety. The modified sugar moiety, preferably a 2'-O-methoxyethyl sugar moiety. The modified sugar moiety as Emethylcytosine. The antisense oligonucleotide nucleobase, preferably a 5-methylcytosine. The antisense oligonucleotide can be used in diagnostics and as research reagents and kits. It can also be used prophylactically, e.g. to prevent or delay infection, cinflammation or tumour formation. It can also be used to treat a disease or condition associated with phosphoinositide-3-kinase, regulatory condition associated with phosphoinositide-3-kinase, regulatory subunit 4, p150, e.g. hyperproliferative disorder. The products of the characteristic immunomodulators with cytostatic activity and can be used
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ö
regulatory subunit 4; p150; internucleoside linkage; phosphorothioare linkage; 2'-O-methoxyethyl sugar; 5-methylcytosine; infection; inflammation; tumour formation; hyperproliferative disorder; cancer; Chediak-Higashi syndrome; metabolic disorder; immunomodulator;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            compound targeted to a nucleic acid molecule encoding
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             phosphoinositide-3-kinase, regulatory subunit 4, p150, useful for treating cancer, Chediak-Higashi syndrome or a metabolic disorder.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                0.4%; Score 20; DB 1; Length 20; 100.0%; Pred. No. 1.4e+02; ative 0; Mismatches 0; Indels
                                                                                                                                                                                                                 /note= "phosphorothioate backbone"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Sequence 20 BP; 1 A; 6 C; 4 G; 9 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ISIS antisense oligonucleotide ISIS 206988.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Example 15; SEQ ID NO 40; 60pp; English.
                                                                            gene therapy; ss; primer
                                                                                                                                                Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1658 AAAAAGCCGAAGGAGACCT 1677
                                                                                                                                                                                                     /mod_base= OTHER
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AAAAAGCCGAAGGAGAGGCCT 1
                                                                                                                                                                                                                                                                                                                                 18-SEP-2003; 2003US-00667022
                                                                                                                                                                                                                                                                                                                                                                     31-MAY-2002; 2002US-00160786
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ADL34596 standard; DNA; 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  (first entry)
                                                                                                                                                                     1. .20
/*tag= a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                               Freier SM, Dobie KW;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               WPI; 2004-282523/26.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                          (FREI/) FREIER S M. (DOBI/) DOBIE K W.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       for gene therapy.
                                                                                                                                                                                                                                                               US2004063657-A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     New antisense
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                17-JUN-2004
                                                                                                                                                                       modified_base
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             20;
                                                                                                                                                                                                                                                                                                 01-APR-2004
                                                                               cytostatic;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ADL34596;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    20
                                                                                                                    Synthetic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         RESULT 237
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ADL34596/
ID ADL3
XX
AC ADL3
XX
DT 17-J
XX
XX
           8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    셤
```

```
ô
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 This invention describes a novel antisense oligonucleotides which phosphoinositide-3-kinase, regulatory subunit 4, p150. The phosphoinositide-3-kinase, regulatory subunit 4, p150. The oligonucleotides comprises at least one modified internucleoside linkage, preferably a phosphorothioate linkage. It also comprises at least one modified augar moiety. Preferably a 2'-0-methoxyethyl sugar moiety. The antisense oligonucleotide further comprises at least one modified antisense oligonucleotide further comprises at least one modified antisense oligonucleotide further comprises at least one modified nucleobase, preferably a 5-methylcytosine. The antisense oligonucleotide can be used in diagnostics and as research reagents and kits. It can also be used prophylactically, e.g. to prevent or delay infection, inflammation or tumour formation. It can also be used to treat a disease or condition associated with phosphoinositide-3-kinase, regulatory subunit 4, p150, e.g. hyperprollerative disorder, preferably cancer, chediak-Higashi syndrome or a metabolic disorder. The products of the
antisense; inhibitor; hybridisation; human; phosphoinositide-3-kinase; regulatory subunit 4; p150; internucleoside linkage; phosphorothioate linkage; 2'-0-methoxyethyl sugar; 5-methylcytosine; infection; inflammation; tumour formation; hyperproliferative disorder; cancer; Chediak-Higashi syndrome; metabolic disorder; immunomodulator; cytostatic; gene thexapy; ss; primer.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              nvention are immunomodulators with cytostatic activity and can be used
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    New antisense compound targeted to a nucleic acid molecule encoding phosphoinositide-3-kinase, regulatory subunit 4, p150, useful for treating cancer, Chediak-Higashi syndrome or a metabolic disorder.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            0.4%; Score 20; DB 1; Length 20; 100.0%; Pred. No. 1.40+02; ive 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                       /note= "phosphorothioate backbone"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Sequence 20 BP; 5 A; 4 C; 5 G; 6 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Example 15; SEQ ID NO 42; 60pp; English.
                                                                                                                                                                          Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1978 GCCCAAGATGATGCTACTAT 1997
                                                                                                                                                                                                                                 /mod_base= OTHER
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               GCCCAAGATGATGCTACTAT 1
                                                                                                                                                                                                                                                                                                                                                                                                           31-MAY-2002; 2002US-00160786.
                                                                                                                                                                                                                                                                                                                                                                       18-SEP-2003; 2003US-00667022
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ADL34606 standard; DNA; 20
                                                                                                                                                                                                                  ಡ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  20; Conservative
                                                                                                                                                                                              . .20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Freier SM, Dobie KW;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              WPI; 2004-282523/26.
                                                                                                                                                                                                                                                                                                                                                                                                                                               (FREI/) FREIER S M.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    DOBIE K W.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Best Local Similarity
                                                                                                                                                                                                                                                                                           US2004063657-A1
                                                                                                                                                                          Key
modified_base
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       17-JUN-2004
                                                                                                                                                                                                                                                                                                                                 01-APR-2004.
                                                                                                                                      Synthetic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ADL34606;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      (DOBI/)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   RESULT 236
ADL34606/A
ID ADL3.
XX
AC ADL3.
XX
DT 17-JT
XX
DE ISIS
    셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ð
```

ISIS antisense oligonucleotide ISIS 206998.

```
This invention describes a novel antisense oligonucleotides which specifically hybridises to and inhibits the expression of human phosphoinostitide-3-kinase regulatory subunit 4, p150. The oligonucleotides comprises at least one modified internucleoside linkage, preferably a phosphorothioate linkage. It also comprises at least one modified sugar molety, preferably a 2'-0-methoxyethy1 sugar molety. The antisense oligonucleotide further comprises at least one modified antisense oligonucleotide further comprises at least one modified nucleobase, preferably a 5-methylcytosine. The antisense oligonucleotide can be used in diagnostics and as research reagents and kits it can also be used prophylactically, e.g. to prevent or delay infection, inflammation or tumour formation. It can also be used to treat a disease or condition associated with phosphoinositide-3-kinase, regulatory cancer, chediak-Higashi syndrome or a metabolic disorder. The products of the
             antisense; inhibitor; hybridisation; human; phosphoinositide-3-kinase; regulatory subunit 4; p150; internucleoside linkage; phosphorothioate linkage; 2'-O-methoxyethyl sugar; 5-methylcytosine; infection; inflammation; tumour formation; hyperproliferative disorder; cancer; Chediak-Higashi syndrome; metabolic disorder; immunomodulator; cytostatic; gene therapy; ss; primer.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   nvention are immunomodulators with cytostatic activity and can be used
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Gapa
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                New antisense compound targeted to a nucleic acid molecule encoding
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  phosphoinositide-3-kinase, regulatory subunit 4, p150, useful for treating cancer, Chediak-Higashi syndrome or a metabolic disorder.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             0.4%; Score 20; DB 1; Length 20;
100.0%; Pred. No. 1.4e+02;
Ive 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                /note= "phosphorothioate backbone"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Seguence 20 BP; 6 A; 4 C; 4 G; 6 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Example 15; SEQ ID NO 52; 60pp; English.
                                                                                                                                                                                      Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            2731 GAACCAGTAAGTCGTTCTAT 2750
                                                                                                                                                                                                                              /*tag= a
/mod base= OTHER
                                                                                                                                                                                                                                                                                                                                                                                                                       31-MAY-2002; 2002US-00160786.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 100.08;
                                                                                                                                                                                                                                                                                                                                                                                 18-SEP-2003; 2003US-00667022
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ADL34611 standard; DNA; 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       17-JUN-2004 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    20; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Freier SM, Dobie KW;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    WPI; 2004-282523/26
                                                                                                                                                                                                                                                                                                                                                                                                                                                           (FREI/) FREIER S M.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            (DOBI/) DOBIE K W.
                                                                                                                                                                                                                                                                                                        US2004063657-A1
                                                                                                                                                                                        Key
modified_base
                                                                                                                                                                                                                                                                                                                                             01-APR-2004
                                                                                                                                                     Synthetic.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ADL34611;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    RESULT 239
ADL34611/c
ID ADL34611
XX
AC ADL3461
XX
DT 17-JUN:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Matches
ઠે
```

```
01-APR-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Freier SM,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ADL34657;
                                                                                                                                                                             Synthetic.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   RESULT 241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ADL3465
ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   This invention describes a novel antisense oligonucleotides which specifically hybridises to and inhibits the expression of human phosphoinositide 3-kinase, regulatory subunit 4, p150. The phosphoinoside comprises at least one modified internucleoside linkage, oligonucleotides comprises at least to modified internucleoside linkage, preferably a phosphorothioate linkage. It also comprises at least one modified sugar moiety, preferably a 2'-O-methoxyethyl sugar moiety. The modified sugar moiety, preferably a 2'-O-methoxyethyl sugar moiety. The nucleobase, preferably a S-methylcytosine. The antisense oligonucleotide nucleobase, indiagnostics and as research reagents and kits. It can also be used prophylactically, e.g. to prevent or delay infection, inflammation or tumour formation. It can also be used to treat a disease or condition associated with phosphoinositide-3-kinase, regulatory subunit 4, p150, e.g. hyperproliferative disorder. preferably cancer, chediak Higashi syndrome or a metabolic disorder. The products of the invention are immunomodulators with cytostatic activity and can be used
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ö
                                antisense; inhibitor; hybridisation; human; phosphoinositide-3-kinase; regulatory subunit 4; p150; internucleoside linkage; phosphorothioate linkage; 2'-O-methoxyethyl sugar; 5-methylcytosine; infection; inflammation; tumour formation; hyperproliferative disorder; cancer; Chediak-Higashi syndrome; metabolic disorder; immunomodulator; cytostatic; gene therapy; ss; primer.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              New antisense compound targeted to a nucleic acid molecule encoding phosphoinositide-3-kinase, regulatory subunit 4, p150, useful for treating cancer, Chediak-Higashi syndrome or a metabolic disorder.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Length 20;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Indels
                                                                                                                                                                                                                                                                            /note= "phosphorothioate backbone"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Sequence 20 BP; 7 A; 3 C; 3 G; 7 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1.4e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           0.4%; Score 20; DB 1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           , Pred. No. 1.4
0, Mismatches
   ISIS antisense oligonucleotide ISIS 207003.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Example 15; SEQ ID NO 57; 60pp; English.
                                                                                                                                                                                                      Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  3057 AGTIGATCTIGITAAAACCA 3076
                                                                                                                                                                                                                                                     mod_base= OTHER
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AGTTGATCTTGTTAAAACCA 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ВЪ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                100.08;
                                                                                                                                                                                                                                                                                                                                                                                                                       31-MAY-2002; 2002US-00160786.
                                                                                                                                                                                                                                                                                                                                                                                     18-SEP-2003; 2003US-00667022
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ADL34622 standard; DNA; 20
                                                                                                                                                                                                                         l. .20
/*tag= a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Freier SM, Dobie KW;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   WPI; 2004-282523/26.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Query Match
Best Local Similarity
Matches 20; Conser
                                                                                                                                                                                                                                                                                                                                                                                                                                                           (FREI/) FREIER S M. (DOBI/) DOBIE K W.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         for gene therapy
                                                                                                                                                                                                                                                                                                                  US2004063657-A1
                                                                                                                                                                                                         Key
modified base
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    17-JUN-2004
                                                                                                                                                                                                                                                                                                                                                      01-APR-2004
                                                                                                                                                                       Synthetic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ADL34622
```

```
This invention describes a novel antisense oligonucleotides which specifically hybridises to and inhibits the expression of human phosphoinositide-3-kinase, regulatory subunit 4, p150. The phosphoinositide-3-kinase, regulatory subunit 4, p150. The comprises at least one modified internucleoside linkage, coligonucleotides comprises at least one modified sugar modety, preferably a 2'-O-methoxyethyl sugar modety. The antisense oligonucleotide further comprises at least one modified nucleobase, preferably a 5-methoxyethyl sugar modety. The nucleobase, preferably a 5-methoxyethyl sugar modety. The can be used in diagnostics and as research reagents and kits. It can also be used prophylactically, e.g. to prevent or delay infection, condition associated with phosphoinositide-3-kinase, regulatory or condition associated with phosphoinositide-3-kinase, regulatory condition associated with phosphoinositide-3-kinase, regulatory subunit 4, p150, e.g. hyperproliferative disorder, preferably cancer, chediak-Higashi syndrome or a metabolic disorder. The products of the invention are immunomodulators with cytostatic activity and can be used
                                                              antisense; inhibitor; hybridisation; human; phosphoinositide-3-kinase; regulatory subunit 4; p150; internucleoside linkage; phosphorothioate linkage; 2'-O-methoxyethlyl sugar; 5-methylcytosine; infection; inflammation; tumour formation; hyperproliferative disorder; cancer; Chediak-Higashi syndrome; metabolic disorder; immunomodulator; cytostatic; gene therapy; ss; primer.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      New antisense compound targeted to a nucleic acid molecule encoding phosphoinositide-3-kinase, regulatory subunit 4, p150, useful for treating cancer, Chediak-Higashi syndrome or a metabolic disorder.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                0.4%; Score 20; DB 1; Length 20;
100.0%; Pred. No. 1.4e+02;
ive 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           /mod_base= OTHER
/note= "phosphorothioate backbone"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Sequence 20 BP; 8 A; 5 C; 4 G; 3 T; 0 U; 0 Other;
antisense oligonucleotide ISIS 207022.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Example 15; SEQ ID NO 68; 60pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                      Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      3762 TGTCCAGCTTCTTGGAATTG 3781
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    20 rerccaecricificaarie 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   31-MAY-2002; 2002US-00160786.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    18-SEP-2003; 2003US-00667022.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ADL34657 standard; DNA; 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ಡ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Local Similarity 100.
nes 20; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Dobie KW;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                WPI; 2004-282523/26.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 (FREI/) FREIER S M. (DOBI/) DOBIE K W.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               for gene therapy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       US2004063657-A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        modified base
```

ö

ADL34622,

ઠ 셤

```
US2004063657-A1.
                                                                             Номо варіепв
                                                                                                                                  01-APR-2004.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ADL34680;
                                                                                                                                                                                                                             (DOBI/)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      RESULT 243
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ADL34680
 ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            g
                                                                                                                                                                                                                                                                                                                                                                                                                                                    This invention describes a novel antisense oligonuclectides which specifically hybridises to and inhibits the expression of human phosphoinositide-3-kinase, regulatory subunit 4, p150. The oligonuclectides comprises at least one modified internucleoside linkage, preferably a phosphorothioate linkage. It also comprises at least one modified sugar molety, preferably a 2-0-methoxyethyl sugar molety. The antisense oligonucleotide further comprises at least one modified nucleobase, preferably a 5-methylcytosine. The antisense oligonucleotide further comprises at least one modified nucleobase, preferably a 5-methylcytosine. The antisense oligonucleotide on this and as research reagents and kits. It can also be used prophylactically, e.g. to prevent or delay infection, inflammation or tumour formation. It can also be used to treat a disease or condition associated with phosphoinositide-3-kinase, regulatory chediak-Higashi syndrome or a metabolic disorder, preferably cancer, chediak-Higashi syndrome or a metabolic disorder. The products of the invention are immunomodulators with cytostatic activity and can be used
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ö
                                                  antisense; inhibitor; hybridisation; human; phosphoinositide-3-kinase; regulatory subunit 4; plS0; internucleoside linkage; phosphorothicate linkage; 2'-0-methoxyethyl sugar; 5-methylcytosine; infection; inflammation; tumour formation; hyperproliferative disorder; cancer; Chediak-Higashi syndrome; metabolic disorder; immunomodulator;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         antisense; inhibitor; hybridisation; human; phosphoinositide-3-kinase;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Gaps
                          Phosphoinositide-3-kinase regulatory subunit 4 p150 fragment 124610.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Phosphoinositide-3-kinase regulatory subunit 4 p150 fragment 124621.
                                                                                                                                                                                                                                                                                                                                                                            New antisense compound targeted to a nucleic acid molecule encoding
                                                                                                                                                                                                                                                                                                                                                                                        phosphoinositide-3-kinase, regulatory subunit 4, p150, useful for treating cancer, Chediak-Higashi syndrome or a metabolic disorder.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              0.4%; Score 20; DB 1; Length 20; 100.0%; Pred. No. 1.4e+02; tive 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Sequence 20 BP; 7 A; 6 C; 2 G; 5 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                               Example 15; SEQ ID NO 103; 60pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1083 CACTTATCTTCCAGAGACA 1102
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1 CACTTATCTTCCAGAAGACA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ADL34662 standard; DNA; 20 BP
                                                                                                                    cytostatic; gene therapy; ds.
                                                                                                                                                                                                                             18-SEP-2003; 2003US-00667022
                                                                                                                                                                                                                                                       31-MAY-2002; 2002US-00160786
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       (first entry)
(first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            20; Conservative
                                                                                                                                                                                                                                                                                                                        Freier SM, Dobie KW;
                                                                                                                                                                                                                                                                                                                                                WPI; 2004-282523/26.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Best Local Similarity
                                                                                                                                                                                                                                                                             (FREI/) FREIER S M. (DOBI/) DOBIE K W.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 for gene therapy
                                                                                                                                                                         US2004063657-A1
                                                                                                                                                Homo sapiens.
 17-JUN-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       17-JUN-2004
                                                                                                                                                                                                    01-APR-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ADL34662;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      8
```

```
This invention describes a novel antisense oligonucleotides which specifically hybridises to and inhibits the expression of human phosphoinositided-1-kinase, regulatory subunit 4, p150. The phosphoinositided-1-kinase, regulatory subunit 4, p150. The coligonucleotides comprises at least one modified internucleoside linkage, preferably a phosphorothioate linkage. It also comprises at least one modified sugar molety, preferably a 2'-O-methoxyethyl sugar molety. The antisense oligonucleotide further comprises at least one modified nucleobase, preferably a 5-methylcytosine. The antisense oligonucleotide can be used in diagnostics and as research reagents and kits. It can also be used prophylactically, e.g. to prevent or delay infection, inflammation or tumour formation. It can also be used to treat a disease or condition associated with phosphoinositide-3-kinase, regulatory subunit 4, p150, e.g. hyperprofiferative disorder, preferably cancer, chediak-Higashi syndrome or a metabolic disorder. The products of the invention are immunomodulators with cytostatic activity and can be used
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ö
regulatory subunit 4; p150; internucleoside linkage; phosphorothioate linkage; 2'-O-methoxyethyl sugar; 5-methylcytosine; infection; inflammation; tumour formation; hyperproliferative disorder; cancer; Chediak-Higashi syndicme; metabolic disorder; immunomodulator; cytostatic; gene therapy; ds.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               antisense; inhibitor; hybridisation; human; phosphoinositide-3-kinase; regulatory subunit 4; p150; internucleoside linkage; phosphorothioate linkage; 2'-0-methoxyethyl sugar; 5-methylcytosine; infection; inflammation; tumour formation; hyperproliferative disorder; cancer; Chediak-Higashi syndrome; metabolic disorder; immunomodulator; cytostatic; gene therapy; ds.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Phosphoinositide-3-kinase regulatory subunit 4 p150 fragment 124640.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     New antisense compound targeted to a nucleic acid molecule encoding phosphoinositide-3-kinase, regulatory subunit 4, p150, useful for treating cancer, Chediak-Higashi syndrome or a metabolic disorder.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  .;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             0.4%; Score 20; DB 1; Length 20; 100.0%; Pred. No. 1.4e+02; ive 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Sequence 20 BP; 6 A; 5 C; 4 G; 5 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Example 15; SEQ ID NO 108; 60pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1630 CACAATCTCTGTGGACATGA 1649
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CACAATCTCTGTGGACATGA 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ADL34680 standard; DNA; 20 BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   18-SEP-2003; 2003US-00667022
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          31-MAY-2002; 2002US-00160786
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          17-JUN-2004 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Query Match
Best Local Similarity 100.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Freier SM, Dobie KW;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   WPI; 2004-282523/26.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 (FREI/) FREIER S M.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               DOBIE K W.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      for gene therapy.
```

```
This invention describes a novel antisense oligonucleotides which specifically hybridises to and inhibits the expression of human oppositions titled-3-kinase, regulatory subunit 4, p150. The phosphoinositide-3-kinase, regulatory subunit 4, p150. The oligonucleotides comprises at least one modified internucleoside linkage, preferably a phosphorothicate linkage. It also comprises at least one antisense oligonucleotide further comprises at least one modified sugar molety, preferably a 2'-O-methoxyethyl sugar molety. The antisense oligonucleotide further comprises at least one modified nucleobase, preferably a 5-methylcytosine. The antisense oligonucleotide can be used in diagnostics and as research reagents and kits. It can also be used prophylactically, e.g. to prevent or delay infection, inflammation or tumour formation. It can also be used to treat a disease or condition associated with phosphoinositide-3-kinase, regulatory subunit 4, p150, e.g. hyperproliferative disorder, preferably cancer, chediak-Higashi syndrome or a metabolic disorder. The products of the invention are immunomodulators with cytostatic activity and can be used
                                                                                                                                                                                                                           compound targeted to a nucleic acid molecule encoding
                                                                                                                                                                                                                                              phosphoinositide-3-kinase, regulatory subunit 4, p150, useful for treating cancer, Chediak-Higashi syndrome or a metabolic disorder
                                                                                                                                                                                                                                                                                                  Example 15; SEQ ID NO 137; 60pp; English.
                               18-SEP-2003; 2003US-00667022
                                                                 31-MAY-2002; 2002US-00160786
                                                                                                                                                            Dobie KW;
                                                                                                                                                                                           WPI; 2004-282523/26.
                                                                                                      FREI/) FREIER S M.
                                                                                                                       (DOBI/) DOBIE K W.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        for gene therapy.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          US2004063657-A1.
                                                                                                                                                                                                                                  New antisense
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    modified base
01-APR-2004.
                                                                                                                                                            Freier SM,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Synthetic.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ADL34588;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            RESULT 245
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ADL34588/
ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                This invention describes a novel antisense oligonucleotides which specifically hybridises to and inhibits the expression of human phosphoinositide3-% timase, regulatory subunit 4, p150. The oligonucleotides comprises at least one modified internucleoside linkage, preferably a phosphorothioate linkage. It also comprises at least one modified sugar moiety, preferably a 2'-O-methoxyethyl sugar moiety. The antisense oligonucleotide further comprises at least one modified uncleobase, preferably a S-Methylcytosine. The antisense oligonucleotide can be used in diagnostics and as research reagents and kits. It can also be used prophylactically, e.g. to prevent or delay infection, inflammation or tumour formation. It can also be used to treat a disease or condition associated with phosphoinositide-3-kinase, regulatory subunit 4, p150, e.g. hyperproliferative disorder, preferably cancer, chediak-Higashi syndrome or a metabolic disorder. The products of the invention are immunomodulators with cytostatic activity and can be used
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         antisense; inhibitor; hybridisation; human; phosphoinositide-3-kinase; regulatory subunit 4; p150; internucleoside linkage; phosphorothioate linkage; 2'-O-methoxyethyl sugar; 5-methylcytosine; infection; inflammation; tumour formation; hyperproliferative disorder; cancer; Chediak Higashi syndrome; metabolic disorder; immunomodulator; cytostatic; gene therapy; ds.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Phosphoinositide-3-kinase regulatory subunit 4 p150 fragment 124655.
                                                                                                                                                                                                                                                                                                                    New antisense compound targeted to a nucleic acid molecule encoding phosphoinositide-3-kinase, regulatory subunit 4, p150, useful for treating cancer, Chediak-Higashi syndrome or a metabolic disorder.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           .;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        0.4%; Score 20; DB 1; Length 20; 100.0%; Pred. No. 1.4e+02; ive 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Sequence 20 BP; 1 A; 6 C; 5 G; 8 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                 Example 15; SEQ ID NO 126; 60pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                3250 TCTGCTGGCATTTGTGTCCC 3269
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1 TCTGCTGGCATTTGTGTCCC 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ADL34691 standard; DNA; 20 BP
                                                                                                                            18-SEP-2003; 2003US-00667022
                                                                                                                                                              31-MAY-2002; 2002US-00160786
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               20; Conservative
                                                                                                                                                                                                                                                     Freier SM, Dobie KW;
                                                                                                                                                                                                                                                                                       WPI; 2004-282523/26.
                                                                                                                                                                                               (FREI/) FREIER S M. (DOBI/) DOBIE K W.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Best Local Similarity
Matches 20; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     for gene therapy
                                                       US2004063657-A1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             US2004063657-A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Homo sapiens.
                      Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                17-JUN-2004
                                                                                         01-APR-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ADL34691;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         244
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ઠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   셤
```

```
ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            antisense; inhibitor; hybridisation; human; phosphoinositide-3-kinase; regulatory subunit 4; p150; internucleoside linkage; phosphorothioate linkage; 2'-O-methoxyethyl sugar; 5-methylcytosine; infection; inflammation; tumour formation; hyperproliferative disorder; cancer; Chediak-Higashi syndrome; metabolic disorder; immunomodulator; cytostatic; gene therapy; ss; primer.
                                                                                                               Gaps
                                                                                                               ;
0
                                                         Length 20;
                                                                                                             0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          /note= "phosphorothioate backbone"
Sequence 20 BP; 2 A; 8 C; 3 G; 7 T; 0 U; 0 Other;
                                                'Match 0.4%; Score 20; DB 1; Le
Local Similarity 100.0%; Pred. No. 1.4e+02;
hes 20; Conservative 0; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ISIS antisense oligonucleotide ISIS 206980.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Location/Qualifiers
                                                                                                                                                                      3991 GGCCTCATCACTTCCTTTGC 4010
                                                                                                                                                                                                                          20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   /mod_base= OTHER
                                                                                                                                                                                                           1 GGCCTCATCACTTCCTTTGC
                                                                                                                                                                                                                                                                                                                                                                   ADL34588 standard; DNA; 20 BP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1. .20
/*tag= a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              17-JUN-2004 (first entry)
```

```
US2004063657-A1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         RESULT 247
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ADL34643
원
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             8
                                                                                                                                                                                                                                                                                                                                                                            This invention describes a novel antisense oligonucleotides which specifically hybridises to and inhibits the expression of human phosphorositides. Finase, regulatory subunit 4, p150. The oligonucleotides comprises at least one modified internucleoside linkage, oligonucleotides comprises at least to modified internucleoside linkage, or antisense oligonucleotide further comprises at least one modified and moiety, preferably a 2'-0-methoxyethyl sugar moiety. The antisense oligonucleotide further comprises at least one modified nucleobase, preferably a S-methylyvtosine. The antisense oligonucleotide combrises at least one modified nucleobase, preferably a S-methylyvtosine. The antisense oligonucleotide combrises and as research reagents and kits. It can also be used prophylactically, e.g. to prevent or delay infection, inflammation or tumour formation. It can also be used to treat a disease condition associated with phosphoinositide-3-kinase, regulatory subunit 4, p150, e.g. hyperproliferative disorder, preferably cancer, chediak-Higashi syndrome or a metabolic disorder. The products of the invention are immunomodulators with cytostatic activity and can be used
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              antisense; inhibitor; hybridisation; human; phosphoinositide-3-kinase; regulatory subunit 4; p150; internucleoside linkage; phosphorothioate linkage; 2'-O-methoxyethyl sugar; 5-methylcytosine; infection; inflammation; tumour formation; hyperproliferative disorder; cancer; Chediak-Higashi syndrome; metabolic disorder; immunomodulator; cytostatic; gene therapy; ss; primer.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Gaps
                                                                                                                                                                                                                                                                 New antisense compound targeted to a nucleic acid molecule encoding phosphoinositide-3-kinase, regulatory subunit 4, p150, useful for treating cancer, Chediak-Higashi syndrome or a metabolic disorder.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      0.4%; Score 20; DB 1; Length 20;
100.0%; Pred. No. 1.4e+02;
ive 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        /note= "phosphorothioate backbone"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Sequence 20 BP; 5 A; 4 C; 3 G; 8 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ISIS antisense oligonucleotide ISIS 207039.
                                                                                                                                                                                                                                                                                                                                                Example 15; SEQ ID NO 34; 60pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1414 GATCACAGTATCAGAGTT 1433
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      /mod_base= OTHER
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           GATCACAGTATCAGAGATT 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ADL34639 standard; DNA; 20 BP
                                                      18-SEP-2003; 2003US-00667022
                                                                                          31-MAY-2002; 2002US-00160786
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Ø
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              20; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ...20
                                                                                                                                                                                         Freier SM, Dobie KW;
                                                                                                                                                                                                                             WPI; 2004-282523/26.
                                                                                                                              (FREI/) FREIER S M. (DOBI/) DOBIE K W.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  for gene therapy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Key
modified_base
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      17-JUN-2004
                  01-APR-2004.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Synthetic.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ADL34639;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     RESULT 246
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ADL34639/
```

셤

ઠે

```
This invention describes a novel antisense oligonucleotides which specifically hybridises to and inhibits the expression of human phosphonositided-3 kinase, regulatory subunit 4, p150. The phosphoinositided-3 kinase, regulatory subunit 4, p150. The oligonucleotides comprises at least one modified internucleoside linkage, preferably a phosphorothioate linkage. It also comprises at least one modified sugar moisty, preferably a 2'-O-methoxyethyl sugar moisty. The antisense oligonucleotide further comprises at least one modified nucleobase, preferably a 5-methyloytosine. The antisense oligonucleotide can be used in diagnostics and as research reagents and kits. It can also be used prophylactically, e.g. to prevent or delay infection, inflammation or tumour formation. It can also be used to treat a disease or condition associated with phosphoinositide-3-kinase, regulatory subunit 4, p150, e.g. hyperprofiferative disorder, preferably cancer, Chediak-Higashi syndrome or a metabolic disorder. The products of the invention are immunomodulators with cytostatic activity and can be used
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         antisense; inhibitor; hybridisation; human; phosphoinositide-3-kinase; regulatory subunit 4; pl50; internucleoside linkage; phosphorothioate linkage; 2'-0-methoxyethyl sugar; 5-methylcytosine; phosphorothioate linkage; 2'-0-methoxyethyl sugar; 5-methylcytosine; infection; inflammation; tumour formation; hyperproliferative disorder; cancer; Chediak-Higashi syndrome; metabolic disorder; immunomodulator;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Gapa
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Phosphoinositide-3-kinase regulatory subunit 4 p150 fragment 124593.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                New antisense compound targeted to a nucleic acid molecule encodin
phosphoinositide-3-kinase, regulatory subunit 4, p150, useful for
treating cancer, Chediak-Higashi syndrome or a metabolic disorder.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  0.4%; Score 20; DB 1; Length 20; 100.0%; Pred. No. 1.4e+02; Live 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Sequence 20 BP; 7 A; 4 C; 5 G; 4 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Example 15; SEQ ID NO 85; 60pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     4761 CTGTTTCATGACTGAC 4780
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CIGITICATGACTGACTGAC 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ADL34643 standard; DNA; 20 BP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               18-SEP-2003; 2003US-00667022.
                                                                               18-SEP-2003; 2003US-00667022
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          cytostatic; gene therapy; ds.
                                                                                                                                                              31-MAY-2002; 2002US-00160786
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Udery Match
Best Local Similarity 100.0.
Chaq 20; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   17-JUN-2004 (first entry)
                                                                                                                                                                                                                                                                                                                                                              Dobie KW;
                                                                                                                                                                                                                                                                                                                                                                                                                                              WPI; 2004-282523/26.
                                                                                                                                                                                                                                     (FREI/) FREIER S M. (DOBI/) DOBIE K W.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           for gene therapy.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    US2004063657-A1.
01-APR-2004
                                                                                                                                                                                                                                                                                                                                                              Freier SM,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    01-APR-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ADL34643;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    20
```

Dobie KW;

Freier SM,

WPI; 2004-282523/26.

```
31-MAY-2002; 2002US-00160786.
          Freier SM, Dobie KW;
              WPI; 2004-282523/26.
     FREI/) FREIER S M.
       DOBIE K W.
       DOBI/)
                                                                               RESULT 248
                                                                                                              Ношо
6
                                                                          g
```

```
This invention describes a novel antisense oligonucleotides which specifically hybridises to and inhibits the expression of human phosphoinositide-3-kinase, regulatory subunit 4, pi50. The phosphoinositide-3-kinase at least one modified internucleoside linkage, or modified sugar molety, preferably a 2'-0-methoxyethyl sugar molety. The antisense oligonucleotide further comprises at least one modified antisense oligonucleotide further comprises at least one modified antisense oligonucleotide further comprises at least one modified nucleobase, preferably a 5-methylcytosine. The antisense oligonucleotide further comprises at least one modified nucleobase, preferably a 5-methylcytosine. The antisense oligonucleotide further comprises at least one modified nucleobase, preferably a 5-methylcytosine. The antisense oligonucleotide further comprises at least one modified in diagnostics and as research reagents and kits. It can also be used prophylactically, e.g. to prevent or delay infection, and inflammation or tumour formation. It can also be used to treat a disease condition associated with phosphoinositide-3-kinase, regulatory subunit 4, p150, e.g. hyperproliferative disorder, preferably canner, character immunomodulators with cytostatic activity and can be used
New antisense compound targeted to a nucleic acid molecule encoding phosphoinositide-3-kinase, regulatory subunit 4, p150, useful for treating cancer, Chediak-Higashi syndrome or a metabolic disorder.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Sequence 20 BP; 2 A; 5 C; 8 G; 5 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                       Example 15; SEQ ID NO 89; 60pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  for gene therapy.
```

```
0; Gaps
   0.4%; Score 20; DB 1; Length 20;
100.0%; Pred. No. 1.4e+02;
ative 0; Mismatches 0; Indels
                                         0; Indels
                                                                            62
                                                                                               CGTTTGCTGGGGCTGCAGCA 20
                                                                         43 CGTTTGCTGGGGCTGCAGCA
Query Match 0.4
Best Local Similarity 100.
Matches 20; Conservative
```

```
Phosphoinositide-3-kinase regulatory subunit 4 p150 fragment 124597.
ADL34646 standard; DNA; 20 BP.
                                                                                          (first entry)
                                                                                          17-JUN-2004
                                             ADL34646;
```

antisense; inhibitor; hybridisation; human; phosphoinositide-3-kinase; regulatory subunit 4; p150; internucleoside linkage; phosphorothioate linkage; 2'-0-methoxyethyl sugar; 5-methylcytosine; infection; inflammation; tumnour formation; hyperproliferative disorder; cancer; Chediak-Higashi syndrome; metabolic disorder; immunomodulator; cytostatic; gene therapy; ds.

```
18-SEP-2003; 2003US-00667022.
                                                                                                                31-MAY-2002; 2002US-00160786.
                                                                                                                                                   (FREI/) FREIER S M. (DOBI/) DOBIE K W.
US2004063657-A1.
                                      01-APR-2004.
```

```
New antisense compound targeted to a nucleic acid molecule encoding
                                   phosphoinositide-3-kinase, regulatory subunit 4, p150, useful for treating cancer, Chediak-Higashi syndrome or a metabolic disorder.
                                                                                                                                                                  Sequence 20 BP; 5 A; 6 C; 3 G; 6 T; 0 U; 0 Other;
                                                   Example 15; SEQ ID NO 92; 60pp; English.
                                                                                                                                                        for gene therapy.
```

Gaps ; 0 / Match 0.4%; Score 20; DB 1; Length 20; Local Similarity 100.0%; Pred. No. 1.46+02; Pres 20; Conservative 0; Mismatches 0; Indels 486 CCTCTGAACGATTTTGACAC 505 CCTCTGAACGATTTTGACAC 20 Query Match Matches ద ઠ

BP.

ADL34695 standard; DNA; 20

RESULT 249

ô

ADL34695

ADL34695;

ö

```
antisense; inhibitor; hybridisation; human; phosphoinositide-3-kinase; regulatory subunit 4; pl50; internucleoside linkage; bhosphorothioate linkage; 2'-O-methoxyethyl sugar; 5-methylcytosine; infection; inflammation; tumour formation; hyperproliferative disorder; cancer; chediak-Higashi syndrome; metabolic disorder; immunomodulator;
                                                                                 Phosphoinositide-3-kinase regulatory subunit 4 p150 fragment 124663.
                                                                                                                                                                                                                                                                                                                                                                       cytostatic; gene therapy; ds.
(first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                        Homo sapiens.
    17-JUN-2004
```

18-SEP-2003; 2003US-00667022. 31-MAY-2002; 2002US-00160786. Freier SM, Dobie KW; WPI; 2004-282523/26. (FREI/) FREIER S M. (DOBI/) DOBIE K W. US2004063657-A1. 01-APR-2004. 

```
This invention describes a novel antisense oligonucleotides which specifically hybridises to and inhibits the expression of human phosphoinositide-3-kinase, regulatory subunit 4, p150. The oligonucleotides comprises at least one modified internucleoside linkage, preferably a phosphorothioate linkage. It also comprises at least one modified sugar molety, preferably a 2-0-methoxyethyl sugar molety. The antisense oligonucleotide further comprises at least one modified nucleobase, preferably a 5-methylcytosine. The antisense oligonucleotide further comprises at least one modified nucleobase, preferably a 5-methylcytosine. The antisense oligonucleotide further comprises at least one modified nucleobase, preferably e.g. to prevent or delay infection, inflammation or tumour formation. It can also be used prophylactically, e.g. to prevent or delay infection, inflammation associated with phosphoinositide-3-kinase, regulatory concondition associated with phosphoinositide-3-kinase, regulatory chediak-Higashi syndrome or a metabolic disorder. The products of the invention are immunomodulators with cytostatic activity and can be used
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    antimense; inhibitor; hybridisation; human; phosphoinositide-3-kinase; regulatory subunit 4; p150; internucleoside linkage; phosphorothioate linkage; 2'-O-methoxyethyl sugar; 5-methylcytosine; infection; inflammation; tumour formation; hyperproliferative disorder; cancer; Chediak-Higashi syndrome; metabolic disorder; immunomodulator;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Phosphoinositide-3-kinase regulatory subunit 4 p150 fragment 124666.
    New antisense compound targeted to a nucleic acid molecule encoding
                    phosphoinositide-3-kinase, regulatory subunit 4, p150, useful for treating cancer, Chediak-Higashi syndrome or a metabolic disorder.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              0.4%; Score 20; DB 1; Length 20; 100.0%; Pred. No. 1.4e+02; ive 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                              Sequence 20 BP; 5 A; 2 C; 6 G; 7 T; 0 U; 0 Other;
                                                                          Example 15; SEQ ID NO 141; 60pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ADL34697 standard; DNA; 20 BP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    cytostatic; gene therapy; ds.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        18-SEP-2003; 2003US-00667022.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                31-MAY-2002; 2002US-00160786.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        20; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Freier SM, Dobie KW;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    WPI; 2004-282523/26.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    (FREI/) FREIER S M. (DOBI/) DOBIE K W.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Similarity
                                                                                                                                                                                                                                                                                                                                                                                                          for gene therapy.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                US2004063657-A1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            17-JUN-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      01-APR-2004.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ADL34697;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Query Match
Best Local 8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            RESULT 250
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ઠે
```

New antisense compound targeted to a nucleic acid molecule encoding phosphoinositide-3-kinase, regulatory subunit 4, p150, useful for treating cancer, Chediak-Higashi syndrome or a metabolic disorder.

Example 15; SEQ ID NO 143; 60pp; English

```
specifically hybridises to and inhibits the expression of human phosphoinositide-14 kinase, regulatory subunit 4, p150. The phosphoinositide-3-kinase, regulatory subunit 4, p150. The cligonuclectides comprises at least one modified internucleoside linkage, preferably a phosphorothioate linkage. It also comprises at least one modified modified sugar molety, preferably a 2'-O-methoxyethyl sugar molety. The antisense oligonuclectide further comprises at least one modified nucleobase, preferably a 5-methylcytosine. The antisense oligonuclectide further comprises at least one modified nucleobase, preferably a 5-methylcytosine. The antisense oligonuclectide further comprises at least one modified can be used in diagnostics and as research reagents and kits. It can also be used prophylactically, e.g. to prevent or delay infection, inflammation or tumour formation. It can also be used to treat a disease or condition associated with phosphoinositide-3-kinase, regulatory combunit 4, p150, e.g. hyperproliferative disorder, preferably cancer, chediak-Higashi syndrome or a metabolic disorder. The products of the invention are immunomodulators with cytostatic activity and can be used
                                                                                                                                                                                                                                                                                                                                                                                                                ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     antisense; inhibitor; hybridisation; human; phosphoinositide-3-kinase; regulatory subunit 4; p150; internucleoside linkage; phosphorothioate linkage; 2'-0-methoxystehyl sugar; 5-methylcytosine; infection; inflammation; tumour formation; hyperproliferative disorder; cancer; Chediak-Higashi syndrome; metabolic disorder; immunomodulator;
                                                                                                                                                                                                                                                                                                                                                                                                                  Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               New antisense compound targeted to a nucleic acid molecule encoding phosphoinositide-3-kinase, regulatory subunit 4, p150, useful for treating cancer, Chediak-Higashi syndrome or a metabolic disorder.
                                                                                                                                                                                                                                                                                                                                                                                                                  ö
                                                                                                                                                                                                                                                                                                                                                                           0.4%; Score 20; DB 1; Length 20;
.00.0%; Pred. No. 1.4e+02;
                                                                                                                                                                                                                                                                                                                                                                                                              0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         /note= "phosphorothioate backbone"
                                                                                                                                                                                                                                                                                                                                      Sequence 20 BP; 8 A; 3 C; 4 G; 5 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ISIS antisense oligonucleotide ISIS 206982.
                                                                                                                                                                                                                                                                                                                                                                                       100.0%; Pred. ...
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       cytostatic; gene therapy; ss; primer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                      4633 GTGTGGAAATAAAACCTACT 4652
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         GTGTGGAAATAAAACCTACT 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     base= OTHER
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ADL34590 standard; DNA; 20 BP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            31-MAY-2002; 2002US-00160786.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       18-SEP-2003; 2003US-00667022
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1. .20
/*tag= a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              17-JUN-2004 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                             Best Local Similarity 100.
Matches 20; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Dobie KW;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          WPI; 2004-282523/26.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               FREIER S M.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   (DOBI/) DOBIE K W.
                                                                                                                                                                                                                                                                                                therapy.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              US2004063657-A1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Key
modified_base
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 01-APR-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Freier SM,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Synthetic.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ADL34590;
                                                                                                                                                                                                                                                                                                  for gene
                                                                                                                                                                                                                                                                                                                                                                           Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             (FREI/)
                                                                                                                                                                                                                                                                                                                                                                                                              Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                RESULT 251
ADL34590/c
$$5555555555555555$$
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                      ઠ
```

```
This invention describes a novel antisense oligonucleotides which specifically hybridises to and inhibits the expression of human phosphoinositide-3-kinase, regulatory subunit 4, p150. The phosphoinositides comprises at least one modified internucleoside linkage, oligonucleotides comprises at least one modified super modety, preferably a 2'-O-methoxyethyl sugar moiety. The modified sugar modety, preferably a 2'-O-methoxyethyl sugar moiety. The curisense oligonucleotide further comprises at least one modified nucleobase, preferably a 5-methylcytosine. The antisense oligonucleotide curisense oligonucleotide inclammation of moderophylactically, e.g. to prevent or delay infection, condition associated with phosphoinositide-3-kinase, regulatory curies subunit 4, p150, e.g. typerproliferative disorder, preferably cancer, chediak-Higashi syndrome or a metabolic disorder. The products of the invention are immunomodulators with cytostatic activity and can be used
                                                                                                                                                                                                                                                                                                          Sequence 20 BP; 7 A; 3 C; 8 G; 2 T; 0 U; 0 Other;
      Example 15; SEQ ID NO 73; 60pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                              3991 GGCCTCATCACTTCCTTTGC 4010
                                                                                                                                                                                                                                                                                                                                                               Best Local Similarity
Matches 20; Conserv
                                                                                                                                                                                                                                                                                     for gene therapy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Synthetic
                                                                                                                                                                                                                                                                                                                                                                                                                                             20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ADL34628;
                                                                                                                                                                                                                                                                                                                                                   Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              RESULT 25
ADL34628/
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            셤
                                                                                                                                                                                                                                                                                                                                                                                                                   ð
                          This invention describes a novel antisense oligonucleotides which specifically hybridises to and inhibits the expression of human phosphoinositide-3-kinase, regulatory subunit 4, piso. The coligonucleotides comprises at least one modified internucleoside linkage, oligonucleotides comprises at least one modified internucleoside linkage, comprises at least one modified sugar molety, preferably a 5-To-methoxyethyl sugar molety. The antisense oligonucleotide further comprises at least one modified nucleobase, preferably a 5-methylcytosine. The antisense oligonucleotide can be used in diagnostics and as research reagents and kits. It can also be used prophylactically, e.g. to prevent or delay infection, inflammation or tumour formation. It can also be used to treat a disease or condition associated with phosphoinositide-3-kinase, regulatory condition associated with phosphoinositide-3-kinase, regulatory chediak-Higashi syndrome or a metabolic disorder. The products of the invention are immunomodulators with cytostatic activity and can be used
                                                                                                                                                                                                                                                                                                                                                                    ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        antisense; inhibitor; hybridisation; human; phosphoinositide-3-kinase; regulatory subunit 4; p150; internucleoside linkage; phosphorochioate linkage; 2'-O-methoxyethyl sugar; 5-methylcytosine; infection; inflammation; tumour formation; hyperproliferative disorder; cancer; Chediak-Higashi syndrome; metabolic disorder; immunomodulator; cytostatic; gene therapy; ss; primer.
                                                                                                                                                                                                                                                                                                                                                                    Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           compound targeted to a nucleic acid molecule encoding
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  New antisense compound targeted to a nucleic acid molecule encodin
phosphoinositide-3-kinase, regulatory subunit 4, p150, useful for
treating cancer, Chediak-Higashi syndrome or a metabolic disorder.
                                                                                                                                                                                                                                                                                                                                                                       ö
                                                                                                                                                                                                                                                                                                                                     Score 20; DB 1; Length 20;
Pred. No. 1.4e+02;
                                                                                                                                                                                                                                                                                                                                                                     0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     /note= "phosphorothioate backbone"
                                                                                                                                                                                                                                                                                                       Sequence 20 BP; 5 A; 5 C; 7 G; 3 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                0.4%; Sco...
100.0%; Pred. No. ...
... 0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ISIS antisense oligonucleotide ISIS 207027.
     Example 15; SEQ ID NO 36; 60pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                       1498 CAGCGTGGCAATGCCTTTCC 1517
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             /*tag= a
/mod base= OTHER
                                                                                                                                                                                                                                                                                                                                                                                                                             20 CAGCGTGGCAATGCCTTTCC 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ADL34627 standard; DNA; 20 BP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      18-SEP-2003; 2003US-00667022
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      31-MAY-2002; 2002US-00160786.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      (first entry)
                                                                                                                                                                                                                                                                                                                                                                            20; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1. .20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Dobie KW;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  WPI; 2004-282523/26.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    (FREI/) FREIER S M. (DOBI/) DOBIE K W.
                                                                                                                                                                                                                                                                                                                                                           Local Similarity
                                                                                                                                                                                                                                                                                for gene therapy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           US2004063657-A1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Key
modified_base
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      17-JUN-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     SM,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          01-APR-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Synthetic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ADL34627;
                                                                                                                                                                                                                                                                                                                                              Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Freier
                                                                                                                                                                                                                                                                                                                                                                            Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           RESULT 252
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ADL34627,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         셤
        ò
```

Gaps

; 0

Length 20; 0; Indels

0.4%; Score 20; DB 1; Le llarity 100.0%; Pred. No. 1.4e+02; Conservative 0; Mismatches 0;

```
antisense; inhibitor; hybridisation; human; phosphoinositide-3-kinase; regulatory subunit 4; p150; internucleoside linkage; phosphorothioare linkage; 2'-0-methoxysthyl sugar; 5-methylcytosine; infection; inflammation; tumour formation; hyperproliferative disorder; cancer; Chediak-Higashi syndrome; metabolic disorder; immunomodulator;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        New antisense compound targeted to a nucleic acid molecule encoding phosphoinositide-3-kinase, regulatory subunit 4, p150, useful for
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    'note= "phosphorothioate backbone"
                                                                                                                                                                                                                                                                                             ISIS antisense oligonucleotide ISIS 207028.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          cytostatic; gene therapy; ss; primer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               OTHER
BP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       18-SEP-2003; 2003US-00667022.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           31-MAY-2002; 2002US-00160786.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1. .20
/*tag= a
/mod base=
                                                                                                                                                ADL34628 standard; DNA; 20
                                                                                                                                                                                                                                                      (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Freier SM, Dobie KW;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   WPI; 2004-282523/26.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             (FREI/) FREIER S M.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     (DOBI/) DOBIE K W.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              US2004063657-A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Key
modified base
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               01-APR-2004.
                                                                                                                                                                                                                                                      17-JUN-2004
```

```
######
                                                                                                                                                                                                                                                                                                                                                                                                                    셤
                                                                                                                                                                                                                                                                                                                                   ઠે
                                         This invention describes a novel antisense oligonucleotides which specifically hybridises to and inhibits the expression of human phosphoinositide—3-kinase, regulatory subunit 4, pi50. The oligonucleotides comprises at least one modified internucleoside linkage, preferably a phosphorothioate linkage. It also comprises at least one modified sugar molety, preferably a 2-0-methoxyethyl sugar molety. The antisense oligonucleotide further comprises at least one modified nucleobase, preferably a 5-methylcytosine. The antisense oligonucleotide can be used in diagnostics and as research reagents and kits. It can also inflammation or tumour formation. It can also be used prophylactically, e.g. to prevent or delay infection, inflammation or tumour formation. It can also be used to treat a disease or condition associated with phosphoinositide—3-kinase, regulatory chediak-Higashi syndrome or a metabolic disorder. The products of the invention are immunomodulators with cytostatic activity and can be used
                                                                                                                                                                                                                                                                                                  ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          regulatory subunit 4; pi50; internucleoside linkage;
phosphorothioate linkage; 2'-O-methoxyethyl sugar; 5-methylcytosine;
infection; inflammation; tumour formation; hyperproliferative disorder;
cancer; Chediak-Higashi syndrome; metabolic disorder; immunomodulator;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                antisense; inhibitor; hybridisation; human; phosphoinositide-3-kinase;
                                                                                                                                                                                                                                                                                                  Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              New antisense compound targeted to a nucleic acid molecule encoding
treating cancer, Chediak-Higashi syndrome or a metabolic disorder.
                                                                                                                                                                                                                                                                                                  ö
                                                                                                                                                                                                                                                                     0.4%; Score 20; DB 1; Length 20; 100.0%; Pred. No. 1.4e+02; tive 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        /note= "phosphorothioate backbone"
                                                                                                                                                                                                                                                  Sequence 20 BP; 7 A; 6 C; 4 G; 3 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ISIS antisense oligonucleotide ISIS 207035.
                       Example 15; SEQ ID NO 74; 60pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             cytostatic, gene therapy, ss, primer,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Location/Qualifiers
                                                                                                                                                                                                                                                                                                                       4050 CAGTGGTACCATGGCTTGTT 4069
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              base= OTHER
                                                                                                                                                                                                                                                                                                                                   20 CAGTGGTACCATGGCTTGTT 1
                                                                                                                                                                                                                                                                                                                                                                                                       ADL34635 standard; DNA; 20 BP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              18-SEP-2003; 2003US-00667022
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   31-MAY-2002; 2002US-00160786
                                                                                                                                                                                                                                                                                                                                                                                                                                                     (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ಹ
                                                                                                                                                                                                                                                                                                 20; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    7. .20
/*tag=
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Preier SM, Dobie KW;
                                                                                                                                                                                                                                                                        Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          (FREI/) FREIER S M. (DOBI/) DOBIE K W.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      WPI; 2004-282523/26
                                                                                                                                                                                                                            for gene therapy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                US2004063657-A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Key
modified_base
                                                                                                                                                                                                                                                                                                                                                                                                                                                    17-JUN-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      01-APR-2004.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Synthetic
                                                                                                                                                                                                                                                                                                                                                                                                                             ADL34635
                                                                                                                                                                                                                                                                                               Matches
                                                                                                                                                                                                                                                                                                                                                                                          셤
                                                                                                                                                                                                                                                                                                                       8
```

```
This invention describes a novel antisense oligonucleotides which specifically hybridises to and inhibits the expression of human phosphoinositided-1 kinase, regulatory subunit 4, p150. The phosphoinositided-3 kinase, regulatory subunit 4, p150. The coligonucleotides comprises at least one modified internucleoside linkage, preferably a phosphorothioate linkage. It also comprises at least one modified sugar modety, preferably a 2'-O-methoxyethyl sugar modety. The antisense oligonucleotide further comprises at least one modified sugar modety, preferably a 5-methylcytosine. The antisense oligonucleotide colleobase, preferably a 5-methylcytosine. The antisense oligonucleotide can be used in diagnostics and as research reagents and kits. It can also be used prophylactically, e.g. to prevent or delay infection, inflammation or tumour formation. It can also be used to treat a disease or condition associated with phosphoinositide-3-kinase, regulatory subunit 4, p150, e.g. hyperprofiferative disorder, preferably cancer, chediak-Higashi syndrome or a metabolic disorder. The products of the invention are immunomodulators with cytostatic activity and can be used
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     antisense; inhibitor; hybridisation; human; phosphoinositide-3-kinase; regulatory subunit 4; p150; internucleoside linkage; phosphorothioare linkage; 2'-O-methoxyethyl sugar; 5-methylcytosine; infection; inflammation; tumour formation; hyperproliferative disorder; cancer; Chediak-Higashi syndrome; metabolic disorder; immunomodulator; cytostatic; gene therapy; ds.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Phosphoinositide-3-kinase regulatory subunit 4 p150 fragment 124603.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  New antisense compound targeted to a nucleic acid molecule encoding phosphoinositide-3-kinase, regulatory subunit 4, p150, useful for treating cancer, Chediak-Higashi syndrome or a metabolic disorder.
phosphoinositide-3-kinase, regulatory subunit 4, p150, useful for treating cancer, Chediak-Higashi syndrome or a metabolic disorder.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                0.4%; Score 20; DB 1; Length 20; 100.0%; Pred. No. 1.4e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Sequence 20 BP; 7 A; 6 C; 2 G; 5 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        100.0%; Pred. N. 100.0%; Pred. N. Mismatches
                                                                                                                      Example 15; SEQ ID NO 81; 60pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Example 15; SEQ ID NO 96; 60pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               4397 ATGTTGCAGGAAGTACT 4416
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            20 ATGTTGTTGCAGGAAGTACT 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ВÞ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    31-MAY-2002; 2002US-00160786.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      18-SEP-2003; 2003US-00667022
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ADL34650 standard; DNA; 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              17-JUN-2004 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Dobie KW;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                WPI; 2004-282523/26.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             (FREI/) FREIER S M.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Local Similarity
hes 20, Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      (DOBI/) DOBIE K W.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         for gene therapy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               US2004063657-A1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             01-APR-2004.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Freier SM,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ADL34650;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              RESULT 255
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ADL34650
```

```
This invention describes a novel antisense oligonucleotides which specifically hybridises to and inhibits the expression of human phosphoinositide-3-kinase, regulatory subunit 4, p150. The cligonucleotides comprises at least one modified internucleoside linkage, preferably a phosphorothioate linkage. It also comprises at least one modified sugar moiety, preferably a 2'-0-methoxyethyl sugar moiety. The antisense oligonucleotide further comprises at least one modified an be used in diagnostics and as research reagents and kits. It can also be used prophylactically, e.g. to prevent or delay infection, inflammation or tumnour formation. It can also be used to treat a disease or condition associated with phosphoinositide-3-kinase, regulatory subunit 4, p150, e.g. hyperproliferative disorder. The products of the continual and the products of the products of the continual and a metabolic disorder. The products of the continual and a metabolic disorder. The products of the continual and the products of the continual and the continual and the products of the continual and the continua
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       This invention describes a novel antisense oligonucleotides which specifically hybridises to and inhibits the expression of human phosphoinositide-3-kinase, regulatory subunit 4, p150. The oligonucleotides comprises at least one modified internucleoside linkage, preferably a phosphorothioate linkage. It also comprises at least one
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    antisense; inhibitor; hybridisation; human; phosphoinositide-3-kinase; regulatory subunit 4; p150; internucleoside linkage; phosphorothioate linkage; 2'-0-methoxyethyl sugar; 5-methylcytosine; infection; inflammation; tumour formation; hyperproliferative disorder; cancer; Chediak-Higashi syndrome; metabolic disorder; immunomodulator; cytostatic; gene therapy; ds.
                                                                                                                                                                                                                                                                                                                                                                                                       invention are immunomodulators with cytostatic activity and can be used
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Phosphoinositide-3-kinase regulatory subunit 4 p150 fragment 124627.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         New antisense compound targeted to a nucleic acid molecule encoding phosphoinositide-3-kinase, regulatory subunit 4, p150, useful for treating cancer, Chediak-Higashi syndrome or a metabolic disorder.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Score 20; DB 1; Length 20;
Pred. No. 1.4e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Sequence 20 BP; 8 A; 3 C; 7 G; 2 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    0.4%; Scor.
100.0%; Pred. No. ...
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Example 15; SEQ ID NO 113; 60pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   780 GGAGGAACTGAAAATCAGGC 799
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1 GGAGGAACTGAAAATCAGGC 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ADL34667 standard; DNA; 20 BP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       18-SEP-2003; 2003US-00667022
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         31-MAY-2002; 2002US-00160786
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Query Match
Best Local Similarity 100.
Matches 20; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Freier SM, Dobie KW;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          WPI; 2004-282523/26.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  (FREI/) FREIER S M. (DOBI/) DOBIE K W.
                                                                                                                                                                                                                                                                                                                                                                                                                                              for gene therapy.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         US2004063657-A1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        17-JUN-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 01-APR-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ADL34667;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  RESULT 256
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         8
```

```
ö
modified sugar moiety, preferably a 2'-0-methoxyethyl sugar moiety. The antisense oligonucleotide further comprises at least one modified nucleobase, preferably a 5-methylcytosine. The antisense oligonucleotide can be used in diagnostics and as research reagents and kits. It can also be used prophylactically, e.g. to prevent or delay infection, inflammation or tumour formation. It can also be used to treat a disease or condition associated with phosphoinositide-3-kinase, regulatory subunit 4, p150, e.g. hyperproliferative disorder, preferably cancer, Chediak-Higashi syndrome or a metabolic disorder. The products of the invention are immunomodulators with cytostatic activity and can be used
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         This invention describes a novel antisense oligonucleotides which specifically hybridises to and inhibits the expression of human phosphoinositide-3-kinase, regulatory subunit 4, p150. The oligonucleotides comprises at least one modified internucleoside linkage,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      antisense; inhibitor; hybridisation; human; phosphoinositide-3-kinase; regulatory subunit 4; p150; internucleoside linkage; phosphorothioare linkage; 2'-O-methoxystehyl sugar; 5-methylcytosine; infection; inflammation; tumour formation; hyperproliferative disorder; cancer; Chediak-Higashi syndrome; metabolic disorder; immunomodulator;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    New antisense compound targeted to a nucleic acid molecule encoding phosphoinositide-3-kinase, regulatory subunit 4, p150, useful for treating cancer, Chediak-Higashi syndrome or a metabolic disorder.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Length 20;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      /note= "phosphorothioate backbone"
                                                                                                                                                                                                                                                                                                                                                                                                                       Sequence 20 BP; 8 A; 4 C; 3 G; 5 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       0.4%; Score 20; DB 1; Le
100.0%; Pred. No. 1.4e+02;
iive 0; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ISIS antisense oligonucleotide ISIS 206965.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Example 15; SEQ ID NO 19; 60pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            cytostatic; gene therapy; ss; primer.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      2080 CTTAATAGGAAAATGACCC 2099
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 base= OTHER
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CTTAATATGGAAAATGACCC 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ВР
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      31-MAY-2002; 2002US-00160786.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      18-SEP-2003; 2003US-00667022
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ADL34573 standard; DNA; 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ď
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    /*tag=
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Freier SM, Dobie KW;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  WPI; 2004-282523/26.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          (FREI/) FREIER S M.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              DOBIE K W.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Local Similarity
                                                                                                                                                                                                                                                                                                                                                                     for gene therapy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     US2004063657-A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                modified_base
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         01-APR-2004.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   17-JUN-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      20;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Synthetic.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ADL34573;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 (DOBI/)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ADL34573/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Key
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   8 \times 8 
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       용
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ð
```

```
ö
preferably a phosphorothioate linkage. It also comprises at least one modified sugar molety, preferably a 2'-O-methoxyethyl sugar molety. The antisense oligonucleotide further comprises at least one modified nucleobase, preferably a 5-methylcytosine. The antisense oligonucleotide further comprises at least one modified be used prophylaterically a 5-methylcytosine. The antisense oligonucleotide can be used prophylaterically or prevent or datay infection, inflammation or tumour formation. It can also be used to treat a disease or condition associated with phosphoinositide-3-kinase, regulatory condition, e.g. hyperproliferative disorder, preferably cancer, chediak-Higashi syndrome or a metabolic disorder. The products of the invention are immunomodulators with cytostatic activity and can be used
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               antisense; inhibitor; hybridisation; human; phosphoinositide-3-kinase; regulatory subunit 4; p150; internucleoside linkage; phosphorothioact linkage; 2'-O-methoxyethyl sugar; 5-methylcytosine; infection; inflammation; tumour formation; hyperproliferative disorder; cancer; Chediak-Higashi syndrome; metabolic disorder; immunomodulator; cytostatic; gene therapy; ss; primer.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       New antisense compound targeted to a nucleic acid molecule encoding phosphoinositide-3-kinase, regulatory subunit 4, p150, useful for treating cancer, Chediak-Higashi syndrome or a metabolic disorder.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                This invention describes a novel antisense oligonucleotides which specifically hybridises to and inhibits the expression of human phosphoinositide-3-kinase, regulatory subunit 4, p150. The
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           0.4%; Score 20; DB 1; Length 20; 100.0%; Pred. No. 1.4e+02; tive 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       /note= "phosphorothioate backbone"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sequence 20 BP; 5 A; 8 C; 4 G; 3 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ISIS antisense oligonucleotide ISIS 206973.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Example 15; SEQ ID NO 27; 60pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           703 CGAGAAGGCCTGGTCGTTGT 722
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      mod_base= OTHER
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               20 CGAGAAGGCCTGGTCGTTGT 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ADL34581 standard; DNA; 20 BP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       18-SEP-2003; 2003US-00667022
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        31-MAY-2002; 2002US-00160786
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         *tag= a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       20; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Freier SM, Dobie KW;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      WPI; 2004-282523/26.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             (FREI/) FREIER S M.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 (DOBI/) DOBIE K W.
                                                                                                                                                                                                                                                                                                                                                                                             for gene therapy.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               US2004063657-A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Key
modified_base
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              17-JUN-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   01-APR-2004.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Synthetic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ADL34581;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ADL34581/7

ID ADL3

AC ADL3

XX ADL3

          8888888888888888888
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 용
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ठ
```

```
ö
preferably a phosphorothioate linkage. It also comprises at least one modified dead an underly a preferably a 2'-O-methoxytehyl sugar molety. The antisense oligonuclectide further comprises at least one modified antisense oligonuclectide further comprises at least one modified nucleobase, preferably a 5-methylcytosine. The antisense oligonuclectide further comprises at least one modified nucleobase, preferably a 5-methylcytosine. The antisense oligonuclectide can be used in diagnostics and as research reagents and kits. It can also be used prophylactically, e.g. to prevent or delay infection, inflammation or tumour formation. It can also be used to treat a disease or condition associated with phospholnositide-3-kinase, regulatory subunit 4, p150, e.g. hyperproliferative disorder, preferably cancer, chediak-Higashi syndrome or a metabolic disorder. The products of the invention are immunomodulators with cytostatic activity and can be used
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 antisense; inhibitor; hybridisation; human; phosphoinositide-3-kinase; regulatory subunit 4; p150; internucleoside linkage; phosphorochioare linkage; 2'-O-methoxyethyl sugar; 5-methylcytosine; infection; inflammation; thomour formation; hyperproliferative disorder; cancer; Chediak-Higashi syndrome; metabolic disorder; immunomodulator;
                                                                                                                                                                                                                                                                                                                               Gapa
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             New antisense compound targeted to a nucleic acid molecule encoding phosphoinositide-3-kinase, regulatory subunit 4, p150, useful for treating cancer, Chediak-Higashi syndrome or a metabolic disorder.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       This invention describes a novel antisense oligonucleotides which specifically hybridises to and inhibits the expression of human
                                                                                                                                                                                                                                                                                                                               ö
                                                                                                                                                                                                                                                                                          0.4%; Score 20; DB 1; Length 20; 100.0%; Pred. No. 1.4e+02;
                                                                                                                                                                                                                                                                                                                           0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    /note= "phosphorothioate backbone"
                                                                                                                                                                                                                                                         Sequence 20 BP; 5 A; 8 C; 3 G; 4 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                 100.0%; Pred. ...
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ISIS antisense oligonucleotide ISIS 207004.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Example 15; SEQ ID NO 58; 60pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              cytostatic; gene therapy; ss; primer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                 1032 GGTCACCAGTTGGAATTGGG 1051
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   OTHER
                                                                                                                                                                                                                                                                                                                                                                                                    GGTCACCAGTTGGAATTGGG 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           BP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                18-SEP-2003; 2003US-00667022
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 31-MAY-2002; 2002US-00160786
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ADL34612 standard; DNA; 20
                                                                                                                                                                                                                                                                       Query Match
Best Local Similarity luv..
Best Local Similarity Lov..
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  17-JUN-2004 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ø
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1. .20
/*tag=
/mod_ba
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Dobie KW;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            WPI; 2004-282523/26.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    (FREI/) FREIER S M. (DOBI/) DOBIE K W.
                                                                                                                                                                                                                         for gene therapy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           US2004063657-A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Key
modified_base
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              01-APR-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Freier SM,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Synthetic.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ADL34612;
                                                                                                                                                                                                                                                                                                                                                                                                    20
     용
                                                                                                                                                                                                                                                                                                                                                                 8
```

```
ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     This invention describes a novel antisense oligonucleotides which specifically hybridises to and inhibits the expression of human phosphoinositide-3-kinase, regulatory subunit 4, p150. The oligonucleotides comprises at least one modified internucleoside linkage, preferably a phosphorothioate linkage. It also comprises at least one modified sugar moiety, preferably a 2'-O-methoxyethyl sugar moiety. The antisense oligonucleotide further comprises at least one modified
phosphoinositide-3-kinase, regulatory subunit 4, p150. The oligonucleotides comprises at least one modified internucleoside linkage, oligonucleotides comprises at least one modified internucleoside linkage. It also comprises at least one modified sugar moiety, preferably a 2'-0-methoxyethyl sugar moiety. The antisense oligonucleotide further comprises at least one modified nucleobase, preferably a 5-methylcytosine. The antisense oligonucleotide can be used in diagnostics and as research reagents and kits. It can also be used prophylactically, e.g. to prevent or delay infection, inflammation or tumour formation. It can also be used to treat a disease crossociated with phosphoinositide-3-kinase, regulatory subunit 4, p150, e.g. hyperproliferative disorder, preferably cancer, chediak-Higashi syndrome or a metabolic disorder. The products of the invention are immunomodulators with cytostatic activity and can be used
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   antisense; inhibitor; hybridisation; human; phosphoinositide-3-kinase; regulatory subunit 4; p150; internucleoside linkage; phosphorothioate linkage; 2'-0-methoxyethyl sugar; 5-methylcytosine; infection; inflammation; tumour formation; hyperproliferative disorder; cancer; Chediak-Higashi syndrome; metabolic disorder; immunomodulator; cytostatic; gene therapy; ds.
                                                                                                                                                                                                                                                                                                                                                                                   Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Phosphoinositide-3-kinase regulatory subunit 4 p150 fragment 124594.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     New antisense compound targeted to a nucleic acid molecule encoding phosphoinositide-3-kinase, regulatory subunit 4, p150, useful for treating cancer, Chediak-Higashi syndrome or a metabolic disorder.
                                                                                                                                                                                                                                                                                                                                                                                   ;
                                                                                                                                                                                                                                                                                                                                              0.4%; Score 20; DB 1; Length 20;
                                                                                                                                                                                                                                                                                                                                                                                   0; Indels
                                                                                                                                                                                                                                                                                                      Sequence 20 BP; 8 A; 5 C; 6 G; 1 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                1.4e+02;
                                                                                                                                                                                                                                                                                                                                                            100.0%; Prec. ...
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Example 15; SEQ ID NO 90; 60pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                             3250 TCTGCTGGCATTTGTGTCCC 3269
                                                                                                                                                                                                                                                                                                                                                                                                                                                  20 TCTGCTGGCATTTGTGTCCC 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     BP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      18-SEP-2003; 2003US-00667022
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                31-MAY-2002; 2002US-00160786
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ADL34644 standard; DNA; 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    (first entry)
                                                                                                                                                                                                                                                                                                                                                  Query Match 0.4
Best Local Similarity 100.
Matches 20; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Dobie KW;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       WPI; 2004-282523/26.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       (FREI/) FREIER S M.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          DOBIE K W.
                                                                                                                                                                                                                                                                       for gene therapy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             US2004063657-A1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  01-APR-2004.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Freier SM,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    17-JUN-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ADL34644;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            (DOBI/)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 260
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       8$88888888888888
                                                                                                                                                                                                                                                                                                                                                                                                                                   ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       g
```

```
This invention describes a novel antisense oligonuclectides which specifically hybridises to and inhibits the expression of human phosphoinostitide-3-kinase, regulatory subunit 4, pl50. The policy probability of the properties of least one modified internucleoside linkage, preferably a phosphorothioate linkage. It also comprises at least one modified sugar motery, preferably a 2'-0-methoxyethyl sugar moiety. The antisense oligonucleotide further comprises at least one modified nucleobase, preferably a 5-methylcytosine. The antisense oligonucleotide can be used in diagnostics and as research reagents and kire. It can also be used prophylactically, e.g. to prevent or delay infection, is discussed in flammation or tumour formation. It can also be used to treat a disease or condition associated with phosphoinositide-3-kinase, regulatory
                                                                                                                                                                                                                                                                                                 ö
nucleobase, preferably a 5-methylcytosine. The antisense oligonucleotide can be used in diagnostics and as research reagents and kits. It can also be used prophylactically, e.g. to prevent or delay infection, inflammation or tumour formation. It can also be used to treat a disease or condition associated with phosphoinositide-3-kinase, regulatory subbunit 4, p150, e.g. hyperproliferative disorder. preferably cancer, chediak-Higashi syndrome or a metabolic disorder. The products of the invention are immunomodulators with cytostatic activity and can be used
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    antisense; inhibitor; hybridisation; human; phosphoinositide-3-kinase; regulatory subunit 4; p150; internucleoside linkage; phosphorothicate linkage; 2'-O-methoxyethyl sugar; 5-methylcytosine; infection; inflammation; tumour formation; hyperproliferative disorder; cancer; Chediak-Higashi. syndrome; metabolic disorder; immunomodulator;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             New antisense compound targeted to a nucleic acid molecule encoding phosphoinositide-3-kinase, regulatory subunit 4, p150, useful for treating cancer, Chediak-Higashi syndrome or a metabolic disorder.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Phosphoinositide-3-kinase regulatory subunit 4 p150 fragment 124613.
                                                                                                                                                                                                                                                                                                   .;
0
                                                                                                                                                                                                                                                     0.4%; Score 20; DB 1; Length 20;
100.0%; Pred. No. 1.4e+02;
ive 0; Mismatches 0; Indels
                                                                                                                                                                                                                Sequence 20 BP; 1 A; 9 C; 4 G; 6 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Example 15; SEQ ID NO 104; 60pp; English.
                                                                                                                                                                                                                                                                                                                                                 CGGTCTGCACTTCTCTCCCG 111
                                                                                                                                                                                                                                                                                                                                                                       CGGTCTGCACTTCTCTCCCG 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               BP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      cytostatic; gene therapy; ds.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      18-SEP-2003; 2003US-00667022
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              31-MAY-2002; 2002US-00160786
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ADL34658 standard; DNA; 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                17-JUN-2004 (first entry)
                                                                                                                                                                                                                                                                Query Match 0.4
Best Local Similarity 100.
Matches 20; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Freier SM, Dobie KW;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            WPI; 2004-282523/26.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       (FREI/) FREIER S M. (DOBI/) DOBIE K W.
                                                                                                                                                                               for gene therapy.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         US2004063657-A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 01-APR-2004.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ADL34658;
                                                                                                                                                                                                                                                                                                                                                     92
                                                                                                                                                                                                                                                                                                                                                                                                                                                            RESULT 261
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ADL34658
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          원
                 22222222222
                                                                                                                                                                                                                                                                                                                                                       8
```

Sequence 20 BP; 6 A; 4 C; 4 G; 6 T; 0 U; 0 Other;

```
This invention describes a novel antisense oligonucleotides which specifically hybridises to and inhibits the expression of human phosphoinositide-3-kinase, regulatory subunit 4, piso. The phosphoinositide-3-kinase at least one modified internucleoside linkage, preferably a phosphorothioate linkage. It also comprises at least one modified sugar molety, preferably a 2'-O-methoxyethyl sugar molety. The antisense oligonucleotide further comprises at least one modified nucleobase, preferably a 5-methylcytosine. The antisense oligonucleotide can be used in diagnostics and as research reagents and kits. It can also be used prophylactically, e.g. to prevent or delay infection, inflammation or tumour formation. It can also be used to treat a disease or condition associated with phosphoinositide-3-kinase, regulatory conduction associated with phosphoinositide-3-kinase, regulatory chediak-Higashi syndrome or a metabolic disorder, preferably cancer, chediak-Higashi syndrome or a metabolic disorder. The products of the invention are immunomodulators with cytostatic activity and can be used
                                                                                                                                                                                   ô
subunit 4, p150, e.g. hyperproliferative disorder, preferably cancer, Chediak-Higashi syndrome or a metabolic disorder. The products of the invention are immunomodulators with cytostatic activity and can be used
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               disorder;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             antisense; inhibitor; hybridisation; human; phosphoinositide-3-kinase; regulatory subunit 4; p150; internucleoside linkage; phosphorothioate linkage; 2'-O-methoxyethyl sugar; 5-methylcytosine; infection; inflammation; tumour formation; hyperproliferative disorder; cancer; Chediak-Higashi syndrome; metabolic disorder; immunomodulator; cytostatic; gene therapy; ds.
                                                                                                                                                                                   Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Phosphoinositide-3-kinase regulatory subunit 4 p150 fragment 124634.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             New antisense compound targeted to a nucleic acid molecule encoding phosphoinositide-3-kinase, regulatory subunit 4, p150, useful for treating cancer, Chediak-Higashi syndrome or a metabolic disorder.
                                                                                                                                                                                   ö
                                                                                                                                           Length 20;
                                                                                                                                                                                 0; Indels
                                                                                                                                       Query Match
0.4%; Score 20; DB 1; Le
Best Local Similarity 100.0%; Pred. No. 1.4e+02;
Matches 20; Conservative 0; Mismatches 0;
                                                                                                   Sequence 20 BP; 8 A; 2 C; 7 G; 3 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Example 15; SEQ ID NO 120; 60pp; English.
                                                                                                                                                                                                                     18-SEP-2003; 2003US-00667022.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              31-MAY-2002; 2002US-00160786
                                                                                                                                                                                                                                                                                                                                                                     ADL34674 standard; DNA; 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                   (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Freier SM, Dobie KW;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       WPI; 2004-282523/26
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  (FREI/) FREIER S M. (DOBI/) DOBIE K W.
                                                             for gene therapy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                for gene therapy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     US2004063657-A1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                   17-JUN-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             01-APR-2004.
                                                                                                                                                                                                                                                                                                                                                                                                           ADL34674;
                                                                                                                                                                                                                                                                                                                               RESULT 262
                                                                                                                                                                                                                                                                                                                                                    ADL34674
  8888888
                                                                                                                                                                                                                                                             q
                                                                                                                                                                                                                                                                                                                                                                       ò
```

```
This invention describes a novel antisense oligonuclectides which specifically hybridises to and inhibits the expression of human phosphoinositide-3 kinase, regulatory subunit 4, p150. The phosphoinositide-3 kinase, regulatory subunit 4, p150. The coligonucleotides comprises at least one modified internucleoside linkage, preferably a phosphorothioate linkage. It also comprises at least one modified and modety, preferably a 2'-O-methoxyethyl sugar modety. The antisense oligonucleotide further comprises at least one modified contisense oligonucleotide can be used in diagnostics and as research reagents and kits. It can also be used prophylactically, e.g. to prevent or delay infection, inflammation or tumour formation. It can also be used to treat a disease contition associated with phosphoinositide-3-kinase, regulatory subunit 4, p150, e.g. hyperproliferative disorder, preferably cancer, chediak-Higashi syndrome or a metabolic disorder. The products of the invention are immunomodulators with cytostatic activity and can be used
                                    ö
                                                                                                                                                                                                                                                                                                                                                   antisense; inhibitor; hybridisation; human; phosphoinositide-3-kinase; regulatory subunit 4; p150; internucleoside linkage; phosphorothioate linkage; 2'-O-methoxyetehyl sugar; 5-methylcytosine; infection; hiflammation; tumour formation; hyperproliferative disorder; cancer; Chediak-Higashi syndrome; metabolic disorder; immunomodulator;
                                    Gapa
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      New antisense compound targeted to a nucleic acid molecule encoding phosphoinositide-3-kinase, regulatory subunit 4, p150, useful for treating cancer, Chediak-Higashi syndrome or a metabolic disorder.
                                      ö
 Length 20;
                                    Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 /note= "phosphorothioate backbone"
0.4%; Score 20; DB 1; Le
100.0%; Pred. No. 1.4e+02;
ative 0; Mismatches 0;
                                                                                                                                                                                                                                                                                                                   ISIS antisense oligonucleotide ISIS 206960.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Example 15; SEQ ID NO 14; 60pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                  cytostatic; gene therapy; ss; primer.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Location/Qualifiers
                                                                         2731 GAACCAGTAAGTCGTTCTAT 2750
                                                                                                          1 GAACCAGTAAGTCGTTCTAT 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                /mod_base= OTHER
                                                                                                                                                                                                      ADL34568 standard; DNA; 20 BP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 18-SEP-2003; 2003US-00667022.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  31-MAY-2002; 2002US-00160786
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1. .20
/*tag= a
                                                                                                                                                                                                                                                                                17-JUN-2004 (first entry)
Query Match 0.4
Best Local Similarity 100.
Matches 20; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Dobie KW;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 WPI; 2004-282523/26.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       (FREI/) FREIER S M. (DOBI/) DOBIE K W.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   for gene therapy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        US2004063657-A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           modified base
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            01-APR-2004.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Freier SM,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Synthetic.
                                                                                                                                                                                                                                           ADL34568;
                                                                                                                                                                                     ADL34568/
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Key
                                                                                                          g
                                                                                                                                                                                                        ð
```

X S

ઠે g

```
for gene therapy
                                                                                                                                                                   RESULT 265
                                                                                                                                                                                                                                                                                                                                                                                                                 Key
                                                                                                                                                                                 ADL3457
                                                                                                                                                                                                        SXS
                                                                                                      8
                                                                                                                           셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 This invention describes a novel antisense oligonucleotides which specifically hybridises to and inhibits the expression of human specifically hybridises to and inhibits the expression of human phosphoinositide 3-kinase, regulatory subunit 4, p150. The coligonucleotides comprises at least to me dolified sugar moiety, preferably a 2'-O-methoxyethyl sugar moiety. The artisense oligonucleotide further comprises at least one modified sugar moiety, preferably a 2'-Methoxyethyl sugar moiety. The modified sugar moiety, preferably a 2'-methoxyethyl sugar moiety. The nucleobase, preferably a 5-methoxyetosine. The antisense oligonucleotide nucleobase, preferably a 5-methoxyetosine. The antisense oligonucleotide can be used in diagnostics and as research reagents and kits. It can also be used prophylactically, e.g. to prevent or delay infection, inflammation or tumour formation. It can also be used to treat a disease or condition associated with phosphoinositide-3-kinase, regulatory condition associated with phosphoinositide-3-kinase, regulatory condition are immunomodulators with cytostatic activity and can be used invention are immunomodulators with cytostatic activity and can be used
                                                                 ö
                                                                                                                                                                                                                                                                                 antisense; inhibitor; hybridisation; human; phosphoinositide-3-kinase; regulatory subunit 4; p150; internucleoside linkage; phosphorothicate linkage; 2'-O-methoxyethyl sugar; 5-methylcytosine; infection; inflammation; tumour formation; hyperproliferative disorder; cancer; Chediak-Higashi syndrome; metabolic disorder; immunomodulator;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         New antisense compound targeted to a nucleic acid molecule encoding phosphoinositide-3-kinase, regulatory subunit 4, p150, useful for treating cancer, Chediak-Higashi syndrome or a metabolic disorder.
                                                                    Gaps
                                                                    ..
0
                               , DB 1; Lens
o. 1.46+02; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                 /mod_base= OTHER
/note= "phosphorothioate backbone"
                Sequence 20 BP; 4 A; 4 C; 5 G; 7 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                              ISIS antisense oligonucleotide ISIS 206961.
                                        0.4%; Score 20; DB 100.0%; Pred. No. 1.4 tive 0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Example 15; SEQ ID NO 15; 60pp; English.
                                                                                                                                                                                                                                                                                                                                                        cytostatic; gene therapy; ss; primer
                                                                                                                                                                                                                                                                                                                                                                                                         Location/Qualifiers
                                                                                             391 CTATGAAGAAGACCCTTCG 410
                                                                                                                                                                                                                                                                                                                                                                                                                                              base= OTHER
                                                                                                                      20 crargaagaagacccrrcg 1
                                                                                                                                                                                      ADL34569 standard; DNA; 20 BP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        18-SEP-2003; 2003US-00667022
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                31-MAY-2002; 2002US-00160786
                                                                                                                                                                                                                                                                                                                                                                                                                                    ಡ
                                                                                                                                                                                                                                        (first entry)
                                                                     20; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                       1. .20
/*tag=
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Dobie KW;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      WPI; 2004-282523/26.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          (FREI/) FREIER S M.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       (DOBI/) DOBIE K W.
                                            Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        US2004063657-A1
                                                                                                                                                                                                                                                                                                                                                                                                             Key
modified_base
                                                                                                                                                                                                                                          17-JUN-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Freier SM,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 01-APR-2004
                                                                                                                                                                                                                                                                                                                                                                                   Synthetic
                                                                                                                                                                                                                 ADL34569;
                                                                                                                                                              RESULT 264
                                                                        Matches
                                                                                                                                                                            ADL34569,
```

```
This invention describes a novel antisense oligonucleotides which specifically hybridises to and inhibits the expression of human specifically hybridises to and inhibits the expression of human constructed that the second internation of human colifications tides shown that a least one modified internations at least one preferably a phosphorothicate linkage. It also comprises at least one modified sugar moiety, preferably a 2'-0-methoxyethyl sugar moiety. The modified sugar moiety preferably a 2'-0-methoxyethyl sugar moiety. The antisense oligonucleotide further comprises at least one modified an beach of indiagnostics and as research reagents and kits. It can also can be used in diagnostics and as research reagents and kits. It can also be used prophylactically, e.g. to prevent or delay infection, inflammation or tumour formation. It can also be used to treat a disease inflammation or tumour formation. It can also be used to treat a disease or condition associated with phosphoinositide-3-kinase, regulatory subunit 4, pls0, e.g. hyperproliferative disorder, preferably cancer, chediak-Higashi syndrome or a metabolic disorder. The products of the
                                                                                                                                                 ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     antisense; inhibitor; hybridisation; human; phosphoinositide-3-kinase; regulatory subunit 4; p150; internucleoside linkage; phosphorothioate linkage; 2'-O-methoxytelthy laugar; 5-methylcytosine; infection; inflammation; tumour formation; hyperproliferative disorder; cancer; Chediak-Higashi syndrome; metabolic disorder; immunomodulator; cytostatic; gene therapy; ss; primer.
                                                                                                                                                 Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    New antisense compound targeted to a nucleic acid molecule encoding phosphoinositide-3-kinase, regulatory subunit 4, p150, useful for treating cancer, Chediak-Higashi syndrome or a metabolic disorder.
                                                                                                                                                 ;
0
                                                                              Length 20;
                                                                  0.4%; Score 20; DB 1; Length 20;
100.0%; Pred. No. 1.46+02;
tive 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            /note= "phosphorothioate backbone"
Sequence 20 BP; 6 A; 3 C; 6 G; 5 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ISIS antisense oligonucleotide ISIS 206962.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Example 15; SEQ ID NO 16; 60pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Location/Qualifiers
                                                                                                                                                                                                                                   486 CCTCTGAACGATTTTGACAC 505
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         /mod_base= OTHER
                                                                                                                                                                                                                                                                              20 CCTCTGAACGATTTTGACAC 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ADL34570 standard; DNA; 20 BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        18-SEP-2003; 2003US-00667022
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              31-MAY-2002; 2002US-00160786
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 *tag= a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   17-JUN-2004 (first entry)
                                                                                          Query Match 0.4
Best Local Similarity 100.
Matches 20; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Dobie KW;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 WPI; 2004-282523/26.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         (FREI/) FREIER S M. (DOBI/) DOBIE K W.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      US2004063657-A1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  modified_base
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         01-APR-2004.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Freier SM,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Synthetic.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ADL34570;
```

```
RESULT 267
                                                                                               Matches
                                                                                                                                                                                            ADL34582/
 88888
                                                                                                                                                                                                                   ઠ
                                                                                                                                       셤
                                                                                    ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              This invention describes a novel antisense oligonucleotides which specifically hybridises to and inhibits the expression of human bybosphoinostides. regulatory subunit 4, p150. The oligonucleotides comprises at least one modified internucleoside linkage, preferably a phosphorothioate linkage. It also comprises at least one modified sugar moiety, preferably a 2'-0-methoxyethyl sugar moiety. The antisense oligonucleotide further comprises at least one modified nucleobase, preferably a 5-methylcytosine. The antisense oligonucleotide can be used in diagnostics and as research reagents and kits. It can also be used prophylactically, e.g. to prevent or delay infection, inflammation or tumour formation. It can also be used to treat a disease or condition associated with phosphoinostitide-3-kinase, regulatory subunit 4, p150, e.g. hyperproliferative disorder, preferably cancer,
                                                                                                                                                                                                                                                                                        antisense; inhibitor; hybridisation; human; phosphoinositide-3-kinase; regulatory subunit 4; plS0; internucleoside linkage; phosphorothioate linkage; 2'-0-methoxyethyl sugar; 5-methylcytosine; infection; inflammation; tumour formation; hyperproliferative disorder; cancer; Chediak-Higashi syndrome; metabolic disorder; immunomodulator;
 invention are immunomodulators with cytostatic activity and can be used
                                                                                    Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           New antisense compound targeted to a nucleic acid molecule encoding phosphoinositide-3-kinase, regulatory subunit 4, p150, useful for treating cancer, Chediak-Higashi syndrome or a metabolic disorder.
                                                                                    ö
                                                         ch 0.4%; Score 20; DB 1; Length 20; I Similarity 100.0%; Pred. No. 1.4e+02; 20; Conservative 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                    'note = "phosphorothioate backbone"
                                    Sequence 20 BP; 3 A; 2 C; 6 G; 9 T; 0 U; 0 Other
                                                                                                                                                                                                                                                                  ISIS antisense oligonucleotide ISIS 206971.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Example 15; SEQ ID NO 25; 60pp; English.
                                                                                                                                                                                                                                                                                                                                                     cytostatic; gene therapy; ss; primer
                                                                                                                                                                                                                                                                                                                                                                                                   Location/Qualifiers
                                                                                                         534 AACCTTACTAAAGACCACAG 553
                                                                                                                                                                                                                                                                                                                                                                                                                                      mod_base= OTHER
                                                                                                                       20 AACCTTACTAAAGACCACAG 1
                                                                                                                                                                                           ADL34579 standard; DNA; 20 BP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           18-SEP-2003; 2003US-00667022.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 31-MAY-2002; 2002US-00160786.
                                                                                                                                                                                                                                                                                                                                                                                                                .20
/*tag= a
                                                                                                                                                                                                                                          (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Freier SM, Dobie KW;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   WPI; 2004-282523/26.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        FREIER S M.
DOBIE K W.
             for gene therapy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            US2004063657-A1
                                                                                                                                                                                                                                                                                                                                                                                                                modified base
                                                                                                                                                                                                                                          17-JUN-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   01-APR-2004
                                                                                                                                                                                                                                                                                                                                                                              Synthetic
                                                                                                                                                                                                                   ADL34579;
                                                         Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        (FREI/) (DOBI/)
                                                                       Best Local
                                                                                                                                                                 RESULT 266
ADL34579/C
                                                                                 Matchea
                                                                                                                               요
                                                                                                                                                                                           SXSS
                                                                                                         ઠે
```

```
ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         This invention describes a novel antisense oligonucleotides which specifically hybridises to and inhibits the expression of human obsophorositides. At mase, regulatory subunit 4, pls0. The phosphoriositides are least one modified internucleoside linkage, preferably a phosphorothioate linkage. It also comprises at least one modified sugar molety, preferably a 2'-O-methoxyethyl sugar molety. The antisense oligonucleotide further comprises at least one modified nucleobase, preferably a 5-methylcytosine. The antisense oligonucleotide further comprises at least one modified can be used in diagnostics and as research reagents and kits. It can also be used prophylactically, e.g. to prevent or delay infection, inflammation or tumour formation. It can also be used to treat a disease or condition associated with phosphoinositide-3-kinase, regulatory
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  antisense; inhibitor; hybridisation; human; phosphoinositide-3-kinase; regulatory subunit 4; p150; internucleoside linkage; phosphorchioare linkage; 2'-O-methoxyethyl sugar; 5-methylcytosine; infection; inflammation; tumour formation; hyperproliferative disorder; cancer; Chediak-Higashi syndrome; metabolic disorder; immunomodulator; cytostatic; gene therapy; ss; primer.
                               nvention are immunomodulators with cytostatic activity and can be used
Chediak-Higashi syndrome or a metabolic disorder. The products of the
                                                                                                                                                                                                                                                                      Gapa
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 New antisense compound targeted to a nucleic acid molecule encoding phosphoinositide-3-kinase, regulatory subunit 4, p150, useful for treating cancer, Chediak-Higashi syndrome or a metabolic disorder.
                                                                                                                                                                                                                                                                      ö
                                                                                                                                                                                                 0.4%; Score 20; DB 1; Length 20;
                                                                                                                                                                                                                                                               0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               /note= "phosphorothioate backbone"
                                                                                                                                   Sequence 20 BP; 4 A; 5 C; 5 G; 6 T; 0 U; 0 Other;
                                                                                                                                                                                                                                1.4e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ISIS antisense oligonucleotide ISIS 206974.
                                                                                                                                                                                                                      100.0%; Pred. ....
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Example 15; SEQ ID NO 28; 60pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                     982 GCACACAAAICIGGAGIICG 1001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            base= OTHER
                                                                                                                                                                                                                                                                                                                                                                              GCACACAAATCTGGAGTTCG 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     BP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             18-SEP-2003; 2003US-00667022
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  31-MAY-2002; 2002US-00160786
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ADL34582 standard; DNA; 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1. .20
/*tag= a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     (first entry)
                                                                                                                                                                                                                                Local Similarity 100.
ses 20; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Dobie KW;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                WPI; 2004-282523/26.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    FREI/) FREIER S M.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   (DOBI/) DOBIE K W.
                                                                        for gene therapy.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                JS2004063657-A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Key
modified_base
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         17-JUN-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               01-APR-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Freier SM,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Synthetic.
                                                                                                                                                                                                                                                                                                                                                                                                   20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ADL34582;
                                                                                                                                                                                                     Query Match
```

888888

g

ઠે

```
condition associated with phosphoinositide-3-kinase, regulatory
                                                                                                                                                                          20
                                                                                                                                                                                                                                                               ADL34609;
                                                                                                    Query Match
                                                                                                                 Best Loca
Matches
                                                                                                                                                                                                                            ADL34609,
                                                                                                                                                                                                                                                  88888888
                                                                                                                                                                          셤
                                                                                                                                                     ਨੇ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     This invention describes a novel antisense oligonucleotides which specifically hybridises to and inhibits the expression of human phosphoinositides—1-kinase, regulatory subunit 4, p150. The phosphoronisitides—1-kinase, regulatory subunit 4, p150. The preferably a phosphorothicate linkage. It also comprises at least one modified sugar moiety, preferably a 2'-0-methoxyethyl sugar moiety. The antisense oligonucleotide further comprises at least one modified nucleobase, preferably a 5-methylcycosine. The antisense oligonucleotide can be used in diagnostics and as research reagents and kits. It can also be used prophylactically, e.g. to prevent or dalay infection, inflammation or tumour formation. It can also be used to treat a disease
                                                                                                                  ..
0
                                                                                                                                                                                                                                                                                                                         antisense; inhibitor; hybridisation; human; phosphoinositide-3-kinase; regulatory subunit 4; p150; internucleoside linkage; phosphorothioate linkage; 2'-0-methoxyethyl sugar; 5-methylcytosine; infection; inflammation; tumour formation; hyperproliferative disorder; cancer; Chediak-Higashi syndrome; metabolic disorder; immunomodulator; cytostatic; gene therapy; ss; primer.
     subunit 4, p150, e.g. hyperproliferative disorder, preferably cancer, chediak-Higashi syndrome or a metabolic disorder. The products of the invention are immunomodulators with cytostatic activity and can be used
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               New antisense compound targeted to a nucleic acid molecule encoding phosphoinositide 3-kinase, regulatory subunit 4, p150, useful for treating cancer, Chediak-Higashi syndrome or a metabolic disorder.
                                                                                                                    Gaps
                                                                                                                    ö
                                                                                           Score 20; DB 1; Length 20;
Pred. No. 1.4e+02;
0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        /note= "phosphorothioate backbone"
                                                                   Sequence 20 BP; 5 A; 2 C; 6 G; 7 T; 0 U; 0 Other;
                                                                                      0.4%; Scor.
100.0%; Pred. No. ...
                                                                                                                                                                                                                                                                                                      ISIS antisense oligonucleotide ISIS 206979.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Example 15; SEQ ID NO 33; 60pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                          Location/Qualifiers
                                                                                                                                              1083 CACTTATCTTCCAGAGACA 1102
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             /mod_base= OTHER
                                                                                                                                                              20 CACTTATCTTCCAGAGACA
                                                                                                                                                                                                                                  ADL34587 standard; DNA; 20 BP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         31-MAY-2002; 2002US-00160786.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  18-SEP-2003; 2003US-00667022
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ď
                                                                                                                                                                                                                                                                                 (first entry)
                                                                                                           Local Similarity 100.
Les 20; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                        ..20
*tag=
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Dobie KW;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              WPI; 2004-282523/26.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  FREIER S M.
DOBIE K W.
                                               for gene therapy.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   US2004063657-A1
                                                                                                                                                                                                                                                                                                                                                                                                                                              Key
modified_base
                                                                                                                                                                                                                                                                                   17-JUN-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            01-APR-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Freier SM,
                                                                                                                                                                                                                                                                                                                                                                                                                      Synthetic
                                                                                                                                                                                                                                                          ADL34587;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   (FREI/)
(DOBI/)
                                                                                                Query Match
                                                                                                                         Matches
```

```
This invention describes a novel antisense oligonucleotides which specifically hybridises to and inhibits the expression of human phosphoinositide-3-kinase, regulatory subunit 4, pi50. The soligonucleotides comprises at least one modified internucleoside linkage, preferably a phosphorothicate linkage. It also comprises at least one modified sugar moiety, preferably a 2'-O-methoxyethyl sugar moiety. The antisense oligonucleotide further comprises at least one modified nucleobase, preferably a 5-methylcyclosine. The antisense oligonucleotide can be used in diagnostics and as research reagents and kits. It can also be used prophylactically, e.g. to prevent or delay infection,
                                                                                                                                                                                                                                                                       ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            antisense; inhibitor; hybridisation; human; phosphoinositide-3-kinase; regulatory subunit 4; p150; internucleoside linkage; phosphorothioate linkage; 2'-O-methoxyethyl sugar; 5-methylcytosine; infection; inflammation; tumour formation; hyperproliferative disorder; cancer; Chedlak-Higashi syndrome; metabolic disorder; immunomodulator; cytostatic; gene therapy; ss; primer.
subunit 4, p150, e.g. hyperproliferative disorder, preferably cancer, chediak-Higashi syndrome or a metabolic disorder. The products of the invention are immunomodulators with cytostatic activity and can be used
                                                                                                                                                                                                                                                                          Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               New antisense compound targeted to a nucleic acid molecule encoding phosphoinositide 3-kinase, regulatory subunit 4, p150, useful for treating cancer, Chediak-Higashi syndrome or a metabolic disorder.
                                                                                                                                                                                                                                                                          ö
                                                                                                                                                                                                                 Length 20;
                                                                                                                                                                                                                                                                          0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          /note= "phosphorothioate backbone"
                                                                                                                                                      Sequence 20 BP; 9 A; 1 C; 5 G; 5 T; 0 U; 0 Other;
                                                                                                                                                                                                                    DB 1; Le
1.4e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ISIS antisense oligonucleotide ISIS 207001.
                                                                                                                                                                                                              0.4%; Score 20; DB
100.0%; Pred. No. 1.4
:ive 0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Example 15; SEQ ID NO 55; 60pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                           1337 CATTATTTGATCTCTCAA 1356
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    OTHER
                                                                                                                                                                                                                                                                                                                                                                           BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            18-SEP-2003; 2003US-00667022
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        31-MAY-2002; 2002US-00160786
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1. .20
/*tag= a
/mod_base= (
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ADL34609 standard; DNA; 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           (first entry)
                                                                                                                                                                                                                                                                                   Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Dobie KW;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   WPI; 2004-282523/26.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   (FREI/) FREIER S M. (DOBI/) DOBIE K W.
                                                                                                                                                                                                                                                       Local Similarity
ses 20; Conserv
                                                                                                             for gene therapy.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  US2004063657-A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Key
modified_base
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       01-APR-2004.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              17-JUN-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Freier SM,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Synthetic.
```

```
01-APR-2004.
                                                                                                                                                                                                                                                                                                                                                                                                                                                      Synthetic.
                                                                                                                                                                                                  20
                                                                                                                                                                                                                                                                                         ADL34619;
                                                                                                                                                                                                                                        RESULT 271
                                                                                                                                                                                                                                                   ADL34619/
ID ADL3
  និន្តិក្រុក្តិក្រុក្តិ
                                                                                                                                                                                                                                                                            ઠે
                                                                                                                                                                                                 셤
                                                                                                                                        ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     This invention describes a novel antisense oligonucleotides which specifically hybridises to and inhibits the expression of human phosphoinostide-3-kinase, regulatory subunit 4, p150. The oligonucleotides comprises at least one modified internucleoside linkage, preferably a phosphorothioate linkage. It also comprises at least one modified sugar moiety, preferably a 2'-O-methoxyethyl sugar moiety. The antisense oligonucleotide further comprises at least one molifieds engare moiety a 5-methylycosine. The antisense oligonucleotide further comprises at least one modified nucleobase, preferably a 5-methylycosine. The antisense oligonucleotide can be used in diagnostics and as research reagents and kits. It can also
inflammation or tumour formation. It can also be used to treat a disease or condition associated with phosphoinostitide-1-kinase, regulatory subunit 4, p150, e.g. hyperproliferative disorder, preferably cancer, chediak-Higashi syndrome or a metabolic disorder. The products of the
                                               invention are immunomodulators with cytostatic activity and can be used
                                                                                                                                                                                                                                                                                                                                                 antimense; inhibitor; hybridisation; human; phosphoinositide-3-kinase; regulatory subunit 4; p150; internucleoside linkage; phosphorothioate linkage; 2'-O-methoxyethyl sugar; 5-methylcytosine; infection; inflammation; tumour formation; hyperproliferative disorder; cancer; Chediak-Higashi syndrome; metabolic disorder; immunomodulator; cytostatic; gene therapy; ss; primer.
                                                                                                                                      Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               New antisense compound targeted to a nucleic acid molecule encoding phosphoinositide-3-kinase, regulatory subunit 4, p150, useful for treating cancer, Chediak-Higashi syndrome or a metabolic disorder.
                                                                                                                                        ö
                                                                                                            Score 20; DB 1; Length 20;
Pred. No. 1.4e+02;
                                                                                                                                     0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 /note= "phosphorothioate backbone"
                                                                                     Sequence 20 BP; 3 A; 6 C; 3 G; 8 T; 0 U; 0 Other;
                                                                                                     0.4%; Scor.
100.0%; Pred. No. ...
                                                                                                                                                                                                                                                                                                                           ISIS antisense oligonucleotide ISIS 207007.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Example 15; SEQ ID NO 61; 60pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                Location/Qualifiers
                                                                                                                                                            2913 AGAGGAAGACAAACTTCTGG 2932
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          /*tag= a
/mod base= OTHER
                                                                                                                                                                            20 AGAGGAAGACAAACTTCTGG
                                                                                                                                                                                                                                                  ADL34615 standard; DNA; 20 BP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          18-SEP-2003; 2003US-00667022
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   31-MAY-2002; 2002US-00160786
                                                                                                                                                                                                                                                                                                   (first entry)
                                                                                                                         Local Similarity 100.
nes 20; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Freier SM, Dobie KW;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        WPI; 2004-282523/26
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          (FREI/) FREIER S M.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       DOBIE K W.
                                                           for gene therapy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           US2004063657-A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Key
modified_base
                                                                                                                                                                                                                                                                                                   17-JUN-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   01-APR-2004.
                                                                                                                                                                                                                                                                                                                                                                                                                                         Synthetic
                                                                                                                                                                                                                                                                            ADL34615;
                                                                                                            Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       (DOBI/)
                                                                                                                                                                                                                           RESULT 270
                                                                                                                                                                                                                                        ADL3463
 8888888
                                                                                                                                                                                  셤
                                                                                                                                                                                                                                                   8
```

```
ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              This invention describes a novel antisense oligonucleotides which specifically hybridises to and inhibite the expression of human phosphoinositide-3-kinase, regulatory subunit 4, p150. The oligonucleotides comprises at least one modified internucleoside linkage, preferably a phosphorothioate linkage. It also comprises at least one modified sugar moiety, preferably a 2'0-methoxyethyl sugar moiety antisense oligonucleotide further comprises at least one modified
                                               a disease
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     nucleobase, preferably a 5-methylcytosine. The antisense oligonucleotide
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              antimense; inhibitor; hybridisation; human; phosphoinositide-3-kinase; regulatory subunit 4; pi50; internucleoside linkage; phosphorothioate linkage; 2'-O-methoxyethyl sugar; 5-methylcytosine; infection; inflammation; tumour formation; hyperproliferative disorder; cancer; Chedlak-Higashi syndrome; metabolic disorder; immunomodulator; cytostatic; gene therapy; ss; primer.
                                                                                                                                                                                            invention are immunomodulators with cytostatic activity and can be used for gene therapy.
be used prophylactically, e.g. to prevent or delay infection, inflammation or tumour formation. It can also be used to treat a disea or condition associated with phosphoinositide-3-kinase, regulatory subunit 4, p150, e.g. hyperproliferative disorder, preferably cancer, Chediak-Higashi syndrome or a metabolic disorder. The products of the
                                                                                                                                                                                                                                                                                                                                                                                                                                                          Gарв
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   New antisense compound targeted to a nucleic acid molecule encoding
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          phosphoinositide-3-kinase, regulatory subunit 4, p150, useful for treating cancer, Chediak-Higashi syndrome or a metabolic disorder.
                                                                                                                                                                                                                                                                                                                                                                                                                                                          ö
                                                                                                                                                                                                                                                                                                                                                                                    Length 20;
                                                                                                                                                                                                                                                                                                                                                                                                                                                          Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    /note= "phosphorothioate backbone"
                                                                                                                                                                                                                                                                                                     Sequence 20 BP; 4 A; 2 C; 5 G; 9 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                            Query Match 0.4%; Score 20; DB 1; Le Best Local Similarity 100.0%; Pred. No. 1.4e+02; Matches 20; Conservative 0; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ISIS antisense oligonucleotide ISIS 207011.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Example 15; SEQ ID NO 65; 60pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     3388 AAAACTGAACTTCAGCAACT 3407
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             /*tag= a
/mod_base= OTHER
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AAAACTGAACTTCAGCAACT 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ADL34619 standard; DNA; 20 BP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             31-MAY-2002; 2002US-00160786
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   .8-SEP-2003; 2003US-00667022
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        17-JUN-2004 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          . .20
*tag=
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Freier SM, Dobie KW
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                WPI; 2004-282523/26.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    (FREI/) FREIER S M.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               (DOBI/) DOBIE K W.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  US2004063657-A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Key
modified_base
```

```
ö
can be used in diagnostics and as research reagents and kits. It can also be used prophylactically, e.g. to prevent or delay infection, inflammation or tumour formation. It can also be used to treat a disease or condition associated with phosphoinositide-3-kinase, regulatory subunit 4, p150, e.g. hyperproliferative disorder, preferably cancer, Chediak-Higashi syndrome or a metabolic disorder. The products of the invention are immunomodulators with cytostatic activity and can be used
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       This invention describes a novel antisense oligonuclectides which specifically hybridises to and inhibits the expression of human phosphoinositide-3-kinase, regulatory subunit 4, p150. The oligonuclectides comprises at least one modified internucleoside linkage, preferably a phosphorothicate linkage. It also comprises at least one modified sugar moiety, preferably a 2'-O-methoxyethyl sugar moiety. The antisense oligonucleotide further comprises at least one modified
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         antisense; inhibitor; hybridisation; human; phosphoinositide-1-kinase; regulatory subunit 4; pl50; internucleoside linkage; phosphorothioate linkage; 2'-0-methoxyethyl sugar; 5-methylcytosine; infection; inflammation; tumour formation; hyperproliferative disorder; cancer; Chediak-Higashi syndrome; metabolic disorder; immunomodulator;
                                                                                                                                                                                                                                       Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   New antisense compound targeted to a nucleic acid molecule encoding
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      phosphoinositide-3-kinase, regulatory subunit 4, p150, useful for treating cancer, Chediak-Higashi syndrome or a metabolic disorder.
                                                                                                                                                                                                                                       ;
0
                                                                                                                                                                                                  DB 1; Length 20;
1.4e+02;
hes 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              /note= "phosphorothioate backbone"
                                                                                                                                                               Sequence 20 BP; 6 A; 4 C; 6 G; 4 T; 0 U; 0 Other;
                                                                                                                                                                                                0.4%; Score 20; DB 100.0%; Pred. No. 1.4
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ISIS antisense oligonucleotide ISIS 207041.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Example 15; SEQ ID NO 87; 60pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   cytostatic; gene therapy; ss; primer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Location/Qualifiers
                                                                                                                                                                                                                                                                         3523 GITGCCCATCTTCATGAGCA 3542
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             /mod base= OTHER
                                                                                                                                                                                                                                                                                                         20 Grreccearcricareacca 1
                                                                                                                                                                                                                                                                                                                                                                                                   BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     18-SEP-2003; 2003US-00667022.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      31-MAY-2002; 2002US-00160786.
                                                                                                                                                                                                                                                                                                                                                                                                   ADL34641 standard; DNA; 20
                                                                                                                                                                                            Query Match 0.49
Best Local Similarity 100.0
Matches 20; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Ø
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1. .20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Freier SM, Dobie KW;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  WPI; 2004-282523/26.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          (FREI/) FREIER S M. (DOBI/) DOBIE K W.
                                                                                                                               for gene therapy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 US2004063657-A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       modified_base
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      17-JUN-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   01-APR-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Synthetic.
                                                                                                                                                                                                                                                                                                                                                                                                                                    ADL34641;
                                                                                                                                                                                                                                                                                                                                                               RESULT 272
                                                                                                                                                                                                                                                                                                                                                                                    ADL34641/
                                                                                                                                                                                                                                                                                                         g
                                                                                                                                                                                                                                                                                                                                                                                                                  88888888888888888
                                                                                                                                                                                                                                                                         ઠે
```

```
nucleobase, preferably a 5-methylcytosine. The antisense oligonucleotide can be used in diagnostics and as research reagents and kits. It can also be used prophylactically, e.g. to prevent or delay infection, inflammation or tumour formation. It can also be used to treat a disease or condition associated with phosphoinositide-3-kinase, regulatory combunit 4, p150, e.g. hyperproliferative disorder, preferably cancer, Chediak-Higashi syndrome or a metabolic disorder. The products of the invention are immunomodulators with cytostatic activity and can be used
                                                                                                                                                                                                                                                                                                        ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           This invention describes a novel antisense oligonucleotides which specifically hybridises to and inhibits the expression of human oliospitales. regalatory subunit 4, pi50. The hospital phosphoinositides. regalatory subunit 4, pi50. The preferably a phosphorothioate last one modified internucleoside linkage, preferably a phosphorothioate linkage. It also comprises at least one modified sugar moiety, preferably a 2'-0-methoxyethyl sugar moiety. The antisense oligonucleotide further comprises at least one modified nucleobase, preferably a 5-methylcytosine. The antisense oligonucleotide can be used in diagnostics and as research reagents and kits. It can also be used prophylactically, e.g. to prevent or delay infection, inflammation or tumour formation. It can also be used to treat a disease or condition associated with phosphoinositide-3-kinase, regulatory
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  antisense; inhibitor; hybridisation; human; phosphoinositide-3-kinase; regulatory subunit 4; p150; internucleoside linkage; phosphorothioate linkage; 2'-0-methoxystehyl sugar; 5-methylcytosine; infection; inflammation; tumour formation; hyperproliferative disorder; cancer; Chediak-Higashi syndrome; metabolic disorder; immunomodulator;
                                                                                                                                                                                                                                                                                                          Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Phosphoinositide-3-kinase regulatory subunit 4 p150 fragment 124599.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          New antisense compound targeted to a nucleic acid molecule encoding
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              phosphoinositide-3-kinase, regulatory subunit 4, p150, useful for
treating cancer, Chediak-Higashi syndrome or a metabolic disorder
                                                                                                                                                                                                                                                                                                        ;
                                                                                                                                                                                                                                                                Length 20;
                                                                                                                                                                                                                                                                                                        Indels
                                                                                                                                                                                                                                                                                                        0
                                                                                                                                                                                                                   Sequence 20 BP; 6 A; 4 C; 2 G; 8 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                           0.4%; Score 20; DB 1; Ls
100.0%; Pred. No. 1.4e+02;
ive 0; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Example 15; SEQ ID NO 94; 60pp; English.
                                                                                                                                                                                                                                                                                                                                                  4792 CAAAATGGTTAAGATGTACT 4811
                                                                                                                                                                                                                                                                                                                                                                         20 CAAAATGGTTAAGATGTACT 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ВЪ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               cytostatic; gene therapy; ds.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    18-SEP-2003; 2003US-00667022.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            31-MAY-2002; 2002US-00160786
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ADL34648 standard; DNA; 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    17-JUN-2004 (first entry)
                                                                                                                                                                                                                                                   Query Match
Best Local Similarity 100.
Matches 20; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Dobie KW;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             WPI; 2004-282523/26.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    (FREI/) FREIER S M.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           (DOBI/) DOBIE K W.
                                                                                                                                                                             for gene therapy.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               JS2004063657-A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          01-APR-2004.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Freier SM,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ADL34648;
                                                                                                                                                                                                                                                                                                                                                                                                                                                           RESULT 273
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ADL34648
      888888888888888
                                                                                                                                                                                                                                                                                                                                                                                      g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            6
```

Sequence 20 BP; 3 A; 4 C; 7 G; 6 T; 0 U; 0 Other;

```
This invention describes a novel antisense oligonucleotides which specifically hybridises to and inhibits the expression of human phosphoinositide-3-kinase, regulatory subunit 4, p150. The oligonucleotides comprises at least one modified internucleoside linkage, preferably a phosphorothioste linkage. It also comprises at least one modified modified sugar molety, preferably a 2-0-methoxyethyl sugar molety. The antisense oligonucleotide further comprises at least one modified nucleobase, preferably a 5-methylcytosine. The antisense oligonucleotide further comprises at least one modified nucleobase, preferably a 5-methylcytosine. The antisense oligonucleotide further comprises at least one modified nucleobase, preferably e.g. to delay infection, inflammation or tumour formation. It can also be used prophylactically, e.g. to delay infection, inflammation or tumour formation. It can also be used to treat a disease or condition associated with phosphoinositide-3-kinase, regulatory chediak-Higashi syndrome or a metabolic disorder. The products of the invention are immunomodulators with cytostatic activity and can be used
                                                                                                                                                                                                                                                                                                                    ö
subunit 4, p150, e.g. hyperproliferative disorder, preferably cancer, Chediak-Higashi syndrome or a metabolic disorder. The products of the invention are immunomodulators with cytostatic activity and can be used
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         antisense; inhibitor; hybridisation; human; phosphoinositide-3-kinase; regulatory subunit 4; p150; internucleoside linkage; phosphorothicate linkage; 2'-O-methoxysterhyl sugar; 5-methylcytosine; infection; inflammation; tumour formation; hyperproliferative disorder; cancer; Chediak-Higashi syndrome; metabolic disorder; immunomodulator;
                                                                                                                                                                                                                                                                                                                    Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Phosphoinositide-3-kinase regulatory subunit 4 p150 fragment 124633.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                New antisense compound targeted to a nucleic acid molecule encoding phosphoinositide-3-kinase, regulatory subunit 4, p150, useful for treating cancer, Chediak-Higashi syndrome or a metabolic disorder.
                                                                                                                                                                                                                                                                                                                    ö
                                                                                                                                                                                                                                        Score 20; DB 1; Length 20;
Pred. No. 1.4e+02;
                                                                                                                                                                                                                                                                                                            0; Indels
                                                                                                                                                                          Sequence 20 BP; 6 A; 4 C; 4 G; 6 T; 0 U; 0 Other;
                                                                                                                                                                                                              0.4%; Scc.
.v 100.0%; Pred. No. 1...
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Example 15; SEQ ID NO 119; 60pp; English.
                                                                                                                                                                                                                                                                                                                                                                                 559 CTTGCCATTATGGGAAATCA 578
                                                                                                                                                                                                                                                                                                                                                                                                                      CTTGCCATTATGGGAAATCA 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 BP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  cytostatic; gene therapy; ds.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           18-SEP-2003; 2003US-00667022
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                31-MAY-2002; 2002US-00160786
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ADL34673 standard; DNA; 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          (first entry)
                                                                                                                                                                                                                                                                                                                Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Freier SM, Dobie KW;
                                                                                                                                                                                                       Query Match
Best Local Similarity
Trans 20; Conserve
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           WPI; 2004-282523/26.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 FREIER S M.
DOBIE K W.
                                                                                                     for gene therapy.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              for gene therapy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     US2004063657-A1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       17-JUN-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      01-APR-2004.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ADL34673;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 (FREI/)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     (DOBI/)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ADL34673

ADL346
8888888
                                                                                                                                                                                                                                                                                                                                                                                                                                                   셤
                                                                                                                                                                                                                                                                                                                                                                                 ò
```

```
This invention describes a novel antisense oligonucleotides which specifically hybridises to and inhibits the expression of human phophorionalitade. Atlanse, regulatory subunit 4, p150. The oligonucleotides comprises at least one modified internucleoside linkage, preferably a phosphorothioate linkage. It also comprises at least one modified sugar molety, preferably a 2'-O-methoxyethyl sugar molety. The antisense oligonucleotide further comprises at least one modified nucleobase, preferably a 5-methylcytosine. The antisense oligonucleotide con nucleobase, preferably a 5-methylcytosine. The antisense oligonucleotide can be used prophylactically, e.g. to prevent or delay infection, inflammation or tumour formation. It can also be used to treat a disease or condition associated with phosphoinositide-3-kinase, regulatory combunit 4, p150, e.g. hyperproliferative disorder, preferably cancer, chediak-Higashi syndrome or a metabolic disorder. The products of the invention are immunomodulators with cytostatic activity and can be used
                                                            ô
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ö
                                                                                                                                                                                                                                                                                                                                                                                     antisense; inhibitor; hybridisation; human; phosphoinositide-3-kinase; regulatory subunit 4; p150; internucleoside linkage; phosphorchioacte linkage; 2'-O-methoxyethyl sugar; S-methylcytosine; infection; inflammation; tumour formation; hyperproliferative disorder; cancer; Chediak-Higashi syndrome; metabolic disorder; immunomodulator; cytostatic; gene therapy; ds.
                                                            Gape
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Gapa
                                                                                                                                                                                                                                                                                                                                                   Phosphoinositide-3-kinase regulatory subunit 4 p150 fragment 124645.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            New antisense compound targeted to a nucleic acid molecule encoding
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  phosphoinositide-3-kinase, regulatory subunit 4, p150, useful for
treating cancer, Chediak-Higashi syndrome or a metabolic disorder.
                                                            ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ..
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  / Match 0.4%; Score 20; DB 1; Length 20; Local Similarity 100.0%; Pred. No. 1.4e+02; No. 20; Conservative 0; Mismatches 0; Indels
                      Length 20;
                                                          0; Indels
                      DB 1; Le
1.4e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Sequence 20 BP; 9 A; 1 C; 6 G; 4 T; 0 U; 0 Other;
                    0.4%; Score 20; DB 100.0%; Pred. No. 1.4 trive 0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Example 15; SEQ ID NO 131; 60pp; English.
                                                                                                2587 GGTGCCGTGGGATTTATCAC 2606
                                                                                                                      1 GGTGCCGTGGGATTTATCAC 20
                                                                                                                                                                                                                                   ADL34685 standard; DNA; 20 BP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 31-MAY-2002; 2002US-00160786.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               18-SEP-2003; 2003US-00667022
                                                                                                                                                                                                                                                                                                           17-JUN-2004 (first entry)
                                                            Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Freier SM, Dobie KW;
Query Match
Best Local Similarity
Thes 20; Conservs
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       WPI; 2004-282523/26
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       (FREI/) FREIER S M.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           (DOBI/) DOBIE K W.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         for gene therapy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    US2004063657-A1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        01-APR-2004.
                                                                                                                                                                                                                                                                         ADL34685;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Query Match
                                                                                                                                                                                          RESULT 275
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Best Loca
Matches
                                                                                                                                                                                                                 ADL34685
                                                                                                                                                                                                                                                     ð
                                                                                                                                용
```

Gaps .; 0

Indels

; 0

ઠે

```
This invention describes a novel antisense oligonucleotides which specifically hybridises to and inhibits the expression of human phosphoinositide 3-kinase, regulatory subunit 4, p150. The phosphoinositide comprises at least one modified internucleoside linkage, oligonucleotides comprises to medified internucleoside linkage, preferably a 2-O-methoxyethyl sugar moiety. preferably a 2-O-methoxyethyl sugar moiety. The modified sugar moiety, preferably a 2-O-methoxyethyl sugar moiety. The modified sugar moiety, preferably a 2-O-methoxyethyl sugar moiety. The nucleobase, preferably a S-methylcytosine. The antisense oligonucleotide uncleobase, preferably a S-methylcytosine. The antisense oligonucleotide can be used in diagnostics and as research reagents and kits. It can also be used prophylactically, e.g. to prevent or delay infection, inflammation or tumour formation. It can also be used to treat a disease or condition associated with phosphoinositide-3-kinase, regulatory condition associated with phosphoinositide-3-kinase, regulatory condition associated with phosphoinositide-3-kinase, regulatory condition are immunomodulators with cytostatic activity and can be used invention are immunomodulators with cytostatic activity and can be used
                                                                                                                                                                                                                                                                               regulatory subunit 4; p150; intermucleoside linkage; phosphoinositide-3-kinase; phosphorothicate linkage; 2'-O-methoxyethyl sugar; 5-methylcytosine; infection; inflammation; tumour formation; hyperproliferative disorder; cancer; Chediak-Higamil syndrome; metabolic disorder; immunomodulator;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         New antisense compound targeted to a nucleic acid molecule encoding phosphoinositide-3-kinase, regulatory subunit 4, p150, useful for treating cancer, Chediak-Higashi syndrome or a metabolic disorder.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        0.4%; Score 20; DB 1; Length 20; 100.0%; Pred. No. 1.4e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    /mod_base= OTHER
/note= "phosphorothioate backbone"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Sequence 20 BP; 6 A; 3 C; 7 G; 4 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                      ISIS antisense oligonucleotide ISIS 206959.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Example 15; SEQ ID NO 13; 60pp; English.
                                                                                                                                                                                                                                                                                                                                                                                              cytostatic; gene therapy; ss; primer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Location/Qualifiers
3455 AGATGATGGAAAATGCTGAA 3474
                         ADL34567 standard; DNA; 20 BP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            18-SEP-2003; 2003US-00667022
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  31-MAY-2002; 2002US-00160786
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ø
                                                                                                                                                                                                                     (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Freier SM, Dobie KW
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          WPI; 2004-282523/26.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          (FREI/) FREIER S M. (DOBI/) DOBIE K W.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        for gene therapy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   US2004063657-A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Key
modified_base
                                                                                                                                                                                                                       17-JUN-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           01-APR-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                            Synthetic
                                                                                                                                                                               ADL34567;
                                                                                                  RESULT 276
                                                                                                                         ADL34567/
```

```
This invention describes a novel antisense oligomucleotides which specifically hybridises to and inhibits the expression of human specifically hybridises to and inhibits the expression of human of phosphoinositide-3-kinase, regulatory subunit 4, p150. The comprises at least one modified internucleoside linkage. Composition internucleoside linkage, preferably a phosphorothioate linkage. It also comprises at least one contised super moiety, preferably a 2'-O-methoxyethy! sugar moiety. The modified sugar moiety, preferably a 2'-O-methoxyethy! sugar moiety. The contiseobase, preferably a sentity comprises at least one modified undleobase, preferably a senthylcytosine. The antisense oligonucleotide can be used prophylactically, e.g. to prevent or delay infection, complylactically, e.g. to prevent or delay infection, condition associated with phosphoinositide-3-kinase, regulatory or condition associated with phosphoinositide-3-kinase, regulatory condition, associated with phosphoinositide-3-kinase, regulatory condition, are immunomodulators with cytostatic activity and can be used invented the condition are immunomodulators with cytostatic activity and can be used
                                                                                                                                                                                                                                                                                                      antisense; inhibitor; hybridisation; human; phosphoinositide-3-kinase; regulatory subunit 4; p150; internucleoside linkage; phosphorothioste linkage; 2'-O-methoxyethyl sugar; 5-methylcytosine; infection; inflammation; tumour formation; hyperproliferative disorder; cancer; chediak-Higashi syndrome; metabolic disorder; immunomodulator;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 New antisense compound targeted to a nucleic acid molecule encoding phosphoinositide 3-kinase, regulatory subunit 4, p150, useful for treating cancer, Chediak-Higashi syndrome or a metabolic disorder.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sequence 20 BP; 8 A; 5 C; 3 G; 4 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        /note= "phosphorothioate backbone"
                                                                                                                                                                                                                                                                           ISIS antisense oligonucleotide ISIS 206966.
0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Example 15; SEQ ID NO 20; 60pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                            cytostatic; gene therapy; ss; primer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Location/Qualifiers
                                     377 AGCCCATCTCTGTCTATGA 396
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       /mod_base= OTHER
                                                            20 AGCCCATCTCTGTCTATGA 1
                                                                                                                                                                   BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      18-SEP-2003; 2003US-00667022.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           31-MAY-2002; 2002US-00160786
                                                                                                                                                                   ADL34574 standard; DNA; 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ď
                                                                                                                                                                                                                                              (first entry)
   20; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         /*tag=
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Dobie KW;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        WPI; 2004-282523/26.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              (FREI/) FREIER S M. (DOBI/) DOBIE K W.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       for gene therapy.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   US2004063657-A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Key
modified base
                                                                                                                                                                                                                                              17-JUN-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      01-APR-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Freier SM,
                                                                                                                                                                                                                                                                                                                                                                                                                                                     Synthetic.
                                                                                                                                                                                                           ADL34574;
       Matches
                                                                                                                                    RESULT 277
                                                                                                                                                                       ò
                                                                            엄
```

0.4%; Score 20; DB 1; Length 20;

Query Match

Query Match Best Local Similarity

Gaps

ö

Length 20; Indele

0.4%; Score 20; DB 1; Le 100.0%; Pred. No. 1.4e+02; ive 0; Mismatches 0;

1215 AGATCCTTCAACTCCGCTTG 1234

8 g

Conservative

Best Local Similarity Matches 20, Conserv

Query Match

AGAICCITCAACICCGCTIG 1

20

ВР

ADL34632 standard; DNA; 20

RESULT 279 ADL34632/c

```
This invention describes a novel antisense oligonucleotides which specifically hybridises to and inhibits the expression of human phosphoinositide-3-kinase, regulatory subunit 4, p150. The phosphoinositide-3-kinase at least one modified internucleoside linkage, preferably a phosphorothioate linkage. It also comprises at least one moitified sugar molety, preferably a 2-O-methoxycthyl sugar molety. The antisense oligonucleotide further comprises at least one molety. The antisense oligonucleotide further comprises at least one molety. The nucleobase, preferably a 5-methycytosine. The antisense oligonucleotide can be used in diagnostics and as research reagents and kits. It can also can be used prophylactically, e.g. to prevent or delay infection, inflammation or tumour formation. It can also be used to treat a disease or condition associated with phosphoinositide-3-kinase, regulatory chediak-Higashi syndrome or a metabolic disorder, preferably cancer, chediak-Higashi syndrome or a metabolic disorder. The products of the invention are immunomodulators with cytostatic activity and can be used
                                                              ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       antisense; inhibitor; hybridisation; human; phosphoinositide-3-kinase; regulatory subunit 4; p150; internucleoside linkage; phosphorothioate linkage; 2'-O-methoxyethyl sugar; 5-methylcytosine; infection; inflammation; tumour formation; hyperproliferative disorder; cancer; Chediak-Higashi syndrome; metabolic disorder; immunomodulator; cytostatic; gene therapy; ss; primer.
                                                                  Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 New antisense compound targeted to a nucleic acid molecule encoding phosphoinositide-3-kinase, regulatory subunit 4, p150, useful for treating cancer, Chediak-Higashi syndrome or a metabolic disorder.
                                                              ö
                                                           0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              /note= "phosphorothioate backbone"
                               Pred. No. 1.4e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ISIS antisense oligonucleotide ISIS 206976.
                                                           Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Example 15; SEQ ID NO 30; 60pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Location/Qualifiers
                                                                                                                             745
100.08; FEL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1. .20
/*tag= a
/mod_base= OTHER
                                                                                                                                                                   GGTTTTGCAATTCAGGATC
                                                                                                                         726 GGTTTTTGCAATTCAGGATC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              18-SEP-2003; 2003US-00667022
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                31-MAY-2002; 2002US-00160786
                                                                                                                                                                                                                                                                                                                                                                   ADL34584 standard; DNA; 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 (first entry)
                    Best Local Similarity 100. Matches 20; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Dobie KW;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      WPI; 2004-282523/26.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           (FREI/) FREIER S M. (DOBI/) DOBIE K W.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                US2004063657-A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Key
modified_base
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 17-JUN-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               01-APR-2004.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Freier SM,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Synthetic.
                                                                                                                                                                                                                                                                                                                                                                                                                           ADL34584;
                                                                                                                                                                                            20
                                                                                                                                                                                                                                                                                                                      ADIJASSSA / ADIJASSSA / ADIJASSSA / ADIJASSSA / ADIJASSSA / ADIJASSA / ADIJAS
                                                                                                                                                                                        셤
                                                                                                                                ò
```

antisense; inhibitor; hybridisation; human; phosphoinositide-3-kinase; regulatory subunit 4; pl50; internucleoside linkage; phosphorothioate linkage; 2'-0-methoxyethyl sugar; 5-methylcytosine; infection; inflammation; tumour formation; hyperproliferative disorder; cancer; Chediak-Higashi syndrome; metabolic disorder; immunomodulator;

cytostatic; gene therapy; ss; primer

Location/Qualifiers

ISIS antisense oligonucleotide ISIS 207032.

(first entry)

17-JUN-2004

ADL34632;

/note= "phosphorothioate backbone"

/mod\_base= OTHER

1. .20 /\*tag= a

Key modified\_base

Synthetic.

18-SEP-2003; 2003US-00667022 31-MAY-2002; 2002US-00160786

US2004063657-A1

01-APR-2004

Dobie KW;

Freier SM,

(FREI/) FREIER S M.

(DOBI/) DOBIE K W.

WPI; 2004-282523/26.

```
This invention describes a novel antisense oligonucleotides which specifically hybridises to and inhibits the expression of human phosphonostitide-3-kinase, regulatory subunit 4, p150. The phosphonostitide-3-kinase, regulatory subunit 4, p150. The coligonucleotides comprises at least one modified internucleoside linkage, preferably a phosphorothioate linkage. It also comprises at least one modified sugar molety, preferably a 2'-O-methoxyethyl sugar molety. The antisense oligonucleotide further comprises at least one modified uncleobase, preferably a 5-methylcytosine. The antisense oligonucleotide conclude and an end as research reagents and kits. It can also be used prophylactically, e.g. to prevent or delay infection, inflammation or tumour formation. It can also be used to treat a disease or condition associated with phosphoinositide-3-kinase, regulatory subunit 4, p150, e.g. hyperprofiferative disorder, preferably cancer, chediak-Higashi syndrome or a metabolic disorder. The products of the invention are immunomodulators with cytostatic activity and can be used
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    New antisense compound targeted to a nucleic acid molecule encoding phosphoinositide-3-kinase, regulatory subunit 4, p150, useful for treating cancer, Chediak-Higashi syndrome or a metabolic disorder.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Seguence 20 BP; 8 A; 4 C; 4 G; 4 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Example 15; SEQ ID NO 78; 60pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          therapy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             for gene
```

Sequence 20 BP; 6 A; 3 C; 7 G; 4 T; 0 U; 0 Other;

for gene therapy.

g

```
This invention describes a novel antisense oligomucleotides which specifically hybridises to and inhibits the expression of human specifically hybridises to and inhibits the expression of human compositions at least one modified internucleoside linkage. Coligomucleotides comprises at least one modified sugar moiety, preferably a 2'-O-methoxyethyl sugar moiety. The antisense oligomucleotide further comprises at least one modified sugar moiety, preferably a 2'-methoxyethyl sugar moiety. The modified sugar moiety, preferably a 2'-methoxyethyl sugar moiety. The moleobase, preferably a S-methylycytosine. The antisense oligomucleotide uncleobase, preferably a s-methylycytosine. The antisense oligomucleotide can be used in diagnostics and as research reagents and kits. It can also be used prophylactically, e.g. to prevent or delay infection, inflammation or tumour formation. It can also be used to treat a disease or condition associated with phosphoinositide-3-kinase, regulatory subunit 4, pls0, e.g. hyperproliferative disorder, preferably cancer, channel to are immunomodulators with cytostatic activity and can be used invention are immunomodulators with cytostatic activity and can be used
                                         ô
                                                                                                                                                                                                                                                                                                                                                                                antisense; inhibitor; hybridisation; human; phosphoinositide-3-kinase; regularory subunit 4; pl50; internucleoside linkage; phosphorothioate linkage; 2'-0-methoxyethyl sugar; 5-methylcytosine; infection; inflammation; tumour formation; hyperproliferative disorder; cancer; Chediak-Higashi syndrome; metabolic disorder; immunomodulator; cytostatic; gene therapy; ds.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         New antisense compound targeted to a nucleic acid molecule encoding phosphoinositide-3-kinase, regulatory subunit 4, p150, useful for treating cancer, Chediak-Higashi syndrome or a metabolic disorder.
                                             Gaps
                                                                                                                                                                                                                                                                                                                                                    Phosphoinositide-3-kinase regulatory subunit 4 p150 fragment 124632.
                                             ..
0
0.4%; Score 20; DB 1; Length 20;
100.0%; Pred. No. 1.4e+02;
ative 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Sequence 20 BP; 4 A; 6 C; 2 G; 8 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Example 15; SEQ ID NO 118; 60pp; English.
                                                                                       4292 ICCATGGTATCTACTGTAGT 4311
                                                                                                               20 TCCATGGTATCTACTGTAGT 1
                                                                                                                                                                                                                                     ADL34672 standard; DNA; 20 BP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 31-MAY-2002; 2002US-00160786.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        18-SEP-2003; 2003US-00667022.
                                                                                                                                                                                                                                                                                                                          (first entry)
                                                  Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Freier SM, Dobie KW;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             WPI; 2004-282523/26.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          (FREI/) FREIER S M. (DOBI/) DOBIE K W.
    Query Match
Best Local Similarity
Matches 20; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                for gene therapy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             US2004063657-A1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       01-APR-2004.
                                                                                                                                                                                                                                                                                                                          17-JUN-2004
                                                                                                                                                                                                                                                                                  ADL34672;
                                                                                                                                                                                                  RESULT 280
```

ö

Gaps

ö

0.4%; Score 20; DB 1; Length 20; 100.0%; Pred. No. 1.4e+02; tive 0; Mismatches 0; Indels

20; Conservative

Query Match Best Local Similarity Matches 20; Conserv

```
This invention describes a novel antisense oligonucleotides which specifically hybridises to and inhibits the expression of human specifically hybridises to and inhibits the expression of human compositionsitide-3-kinase, regulatory subunit 4, p150. The phosphoinositide-3-kinase, regulatory subunit 4, p150. The coligonucleotides comprises at least one modified internucleoside linkage. It also comprises at least one modified sugar moiety, preferably a 2'-O-methoxyethyl sugar moiety. The confise of preferably a 5'-O-methoxyethyl sugar moiety. The confise of preferably a senethylcycsine. The antisense oligonucleotide can be used in diagnostics and as research reagents and kits. It can also be used prophylactically, e.g. to prevent or delay infection, condition associated with phosphoinositide-3-kinase, regulatory condition associated with phosphoinositide-3-kinase, regulatory condition associated with phosphoinositide-3-kinase, regulatory condition, associated with phosphoinositide-3-kinase, regulatory condition are immunomodulators with cytostatic activity and can be used invented the condition are immunomodulators with cytostatic activity and can be used
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ö
                                                                                                                                                                                                                                                                       antisense; inhibitor; hybridisation; human; phosphoinositide-3-kinase; regulatory subunit 4; p150; internucleoside linkage; phosphorothioate linkage; 2'-O-methoxytelpyl sugar; 5-methylcytosine; infection; inflammation; tumour formation; hyperproliferative disorder; cancer; Chediak-Higashi syndrome; metabolic disorder; immunomodulator; cytostatic; gene therapy; ds.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 New antisense compound targeted to a nucleic acid molecule encoding phosphoinositide-3-kinase, regulatory subunit 4, p150, useful for treating cancer, Chediak-Higashi syndrome or a metabolic disorder.
                                                                                                                                                                                                                                       Phosphoinositide-3-kinase regulatory subunit 4 p150 fragment 124639.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         0.4%; Score 20; DB 1; Length 20;
100.0%; Pred. No. 1.4e+02;
iive 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Seguence 20 BP; 7 A; 3 C; 3 G; 7 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Example 15; SEQ ID NO 125; 60pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         3057 AGTIGATCTTGTTAAAACCA 3076
BP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   31-MAY-2002; 2002US-00160786.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  18-SEP-2003; 2003US-00667022.
                                                                                                                                   ADL34679 standard; DNA; 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         20; Conservative
                                                                                                                                                                                                             (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Dobie KW;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       WPI; 2004-282523/26.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           (FREI/) FREIER S M. (DOBI/) DOBIE K W.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           for gene therapy.
                                                                                                                                                                                                                                                                                                                                                                                                                                                          US2004063657-A1.
                                                                                                                                                                                                                                                                                                                                                                                                                        Homo sapiens.
                                                                                                                                                                                                               17-JUN-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  01-APR-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Freier SM,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Query Match
Best Local S
                                                                                                                                                                           ADL34679;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Matches
                                                                                                 RESULT 281
                                                                                                                       ADL34679
                                                                                                                                                         ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 셤
```

(first entry)

```
antisense; inhibitor; hybridisation; human; phosphoinositide-3-kinase; regulatory subunit 4; p150; internucleoside linkage; phosphorothioate linkage; 2'-0-methoxystehyl sugar; 5-methylcytosine; infection; inflammation; tumour formation; hyperproliferative disorder; cancer; Chediak-Higashi syndrome; metabolic disorder; immunomodulator;
                                              Phosphoinositide-3-kinase regulatory subunit 4 p150 fragment 124664.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          New antisense compound targeted to a nucleic acid molecule encoding phosphoinositide-3-kinase, regulatory subunit 4, p150, useful for treating cancer, Chediak-Higashi syndrome or a metabolic disorder.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Example 15; SEQ ID NO 142; 60pp; English.
                                                                                                                                                                                                                                                                                            18-SEP-2003; 2003US-00667022.
                                                                                                                                                                                                                                                                                                                             31-MAY-2002; 2002US-00160786
                                                                                                                                                              cytostatic; gene therapy; ds
                                                                                                                                                                                                                                                                                                                                                                                                               Freier SM, Dobie KW;
                                                                                                                                                                                                                                                                                                                                                                                                                                            WPI; 2004-282523/26
                                                                                                                                                                                                                                                                                                                                                             (FREI/) FREIER S M.
                                                                                                                                                                                                                                                                                                                                                                              (DOBI/) DOBIE K W.
                                                                                                                                                                                                                               US2004063657-A1.
                                                                                                                                                                                               Homo sapiens.
               17-JUN-2004
 ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        This invention describes a novel antisense oligonuclectides which specifically hybridises to and inhibits the expression of human phosphoinositide-3-kinase, regulatory subunit 4, p150. The oligonuclectides comprises a least one modified internucleoside linkage, preferably a phosphorothioate linkage. It also comprises at least one modified sugar moiety, preferably a 2'-0-methoxyethyl sugar moiety. The antisense oligonucleotide further comprises at least one modified nucleobase, preferably a 5-methylcytosine. The antisense oligonucleotide can be used in diagnostics and as research reagents and kits. It can also be used prophylactically, e.g. to prevent or delay infection,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            inflammation or tumour formation. It can also be used to treat a disease or condition associated with phosphoinositide-3-kinase, regulatory
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           subunit 4, p150, e.g. hyperproliferative disorder, preferably cancer, Chediak-Higashi syndrome or a metabolic disorder. The products of the invention are immunomodulators with cytostatic activity and can be used
                                                                                                                                                                              regulatory subunit 4; pi50; internucleoside linkage; phosphorochioace linkage; 2'-O-methoxyethyl sugar; 5-methylcytosine; infection; inflammation; tumour formation; hyperproliferative disorder; cancer; Chediak-Higashi syndrome; metabolic disorder; immunomodulator;
                                                                                                                                                              antisense; inhibitor; hybridisation; human; phosphoinositide-3-kinase;
                                                                                                                            Phosphoinositide-3-kinase regulatory subunit 4 p150 fragment 124649.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           New antisense compound targeted to a nucleic acid molecule encoding phosphoinositide-3-kinase, regulatory subunit 4, p150, useful for treating cancer, Chediak-Higashi syndrome or a metabolic disorder.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Score 20; DB 1; Length 20;
Pred. No. 1.4e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Seguence 20 BP; 4 A; 5 C; 2 G; 9 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 0.4%; Scor.
100.0%; Pred. No. 1...
0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Example 15; SEQ ID NO 134; 60pp; English.
                                                                                                                                                                                                                                              cytostatic; gene therapy; ds.
                                                                                                                                                                                                                                                                                                                                                                           18-SEP-2003; 2003US-00667022.
                                                                                                                                                                                                                                                                                                                                                                                                             31-MAY-2002; 2002US-00160786.
                              ADL34688 standard; DNA; 20
                                                                                             (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Query Match
Best Local Similarity 100.
Matches 20; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Dobie KW;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              WPI; 2004-282523/26.
                                                                                                                                                                                                                                                                                                                                                                                                                                            (FREI/) FREIER S M.
                                                                                                                                                                                                                                                                                                                                                                                                                                                             (DOBI/) DOBIE K W.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              for gene therapy
                                                                                                                                                                                                                                                                                                             JS2004063657-A1
                                                                                                                                                                                                                                                                               Homo sapiens
                                                                                             17-JUN-2004
                                                                                                                                                                                                                                                                                                                                          01-APR-2004.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Freier SM,
                                                               ADL34688;
RESULT 282
```

```
This invention describes a novel antisense oligonucleotides which specifically hybridises to and inhibits the expression of human thosphorositéde3-*Kinase, regulatory subunit 4, p150. The phosphoriositéde3-*Kinase, regulatory subunit 4, p150. The oligonucleotides comprises at least one modified internucleoside linkage. It also comprises at least one modified sugar moiety, preferably a 2'-O-methoxyethyl sugar moiety. The antisense oligonucleotide further comprises at least one modified can be used in diagnostics and as research reagents and kits. It can also be used prophylactically, e.g. to prevent or delay infection, inflammation or tumour formation. It can also be used to treat a disease or condition associated with phosphoinositide-3-kinase, regulatory subunit 4, p150, e.g. hyperproliferative disorder, preferably cancer, condition and subunit 
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   nvention are immunomodulators with cytostatic activity and can be used
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Phosphoinositide-3-kinase regulatory subunit 4 p150 fragment 124670.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              0.4%; Score 20; DB 1; Length 20; 100.0%; Pred. No. 1.4e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Sequence 20 BP; 4 A; 6 C; 4 G; 6 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Local Similarity 100.0%; Pred. No. 1.4 les 20; Conservative 0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    4424 CATCTGTGTCCTACTACAGG 4443
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CATCTGTGTCCTACTACAGG 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ADL34701 standard; DNA; 20 BP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             17-JUN-2004 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              for gene therapy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ADL34701;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                RESULT 284
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Best Loc
Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ADL34701
ID ADL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 셤
```

ö

Gaps

ö

0; Indels

3583 TCACTTTTTGCAACATGTTC 3602 

ADL34696 standard; DNA; 20 BP

RESULT 283

g ઠે

ADL34696

ADL34696 ID ADL3 XX AC ADL3

```
cytostatic; gene therapy; ss; primer.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              RESULT 286
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               This invention describes a novel antisense oligonuclectides which specifically hybridises to and inhibits the expression of human phosphoinositide 3. Figuratory subunit 4, p150. The phosphoinositide 3. Figuratory subunit 4, p150. The oligonucleotides comprises at least one modified internucleoside linkage, oligonucleotides at least to modified sugar moiety, preferably a 2'-O'methoxyethyl sugar moiety. The antisense oligonucleotide further comprises at least one modified sugar moiety, preferably a 2'-O'methoxyethyl sugar moiety. The nucleobase, preferably a S-methylytosine. The antisense oligonucleotide can be used in diagnostics and as research reagents and kits. It can also be used prophylactically, e.g. to prevent or delay infection, inflammation or tumour formation. It can also be used to treat a disease or condition associated with phosphoinositide-3-kinae, regulatory subunit 4, p150, e.g. hyperproliferative disorder, preferably cancer, chediak-Higashi syndrome or a metabolic disorder. The products of the invention are immunomodulators with cytostatic activity and can be used
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 antisense; inhibitor; hybridisation; human; phosphoinositide-3-kinase; regulatory subunit 4; p150; internucleoside linkage; phosphorothioare linkage; 2'-O-methoxyethyl sugar; 5-methylcytosine; infection; inflammation; tumour formation; hyperproliferative disorder; cancer; Chediak-Higashi syndrome; metabolic disorder; immunomodulator;
   antisense; inhibitor; hybridisation; human; phosphoinositide-3-kinase; regulatory subunit 4; p150; internucleoside linkage; phosphorothioarte linkage; 2'-O-methoxyethyl sugar; 5-methylcytosine; infection; inflammation; tumour formation; hyperproliferative disorder; cancer; Chediak-Higashi syndrome; metabolic disorder; immunomodulator;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                           New antisense compound targeted to a nucleic acid molecule encoding
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         phosphoinositide-3-kinase, regulatory subunit 4, p150, useful for treating cancer, Chediak-Higashi syndrome or a metabolic disorder.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               0.4%; Score 20; DB 1; Length 20;
100.0%; Pred. No. 1.4e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Sequence 20 BP; 4 A; 5 C; 3 G; 8 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ISIS antisense oligonucleotide ISIS 206964.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     100.0%; Pred. No. 1.4 :ive 0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Example 15; SEQ ID NO 147; 60pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            4823 CTTATGCATCTTTTGCAAG 4842
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CTTATGCATCTCTTTGCAAG 20
                                                                                                          cytostatic; gene therapy; ds
                                                                                                                                                                                                                                                           18-SEP-2003; 2003US-00667022.
                                                                                                                                                                                                                                                                                          31-MAY-2002; 2002US-00160786.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ADL34572 standard; DNA; 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Ouery Match
Best Local Similarity 100.
Matches 20; Conservative
                                                                                                                                                                                                                                                                                                                                                                                       Freier SM, Dobie KW;
                                                                                                                                                                                                                                                                                                                                                                                                                            WPI; 2004-282523/26.
                                                                                                                                                                                                                                                                                                                                  (FREI/) FREIER S M. (DOBI/) DOBIE K W.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            for gene therapy
                                                                                                                                                                                  US2004063657-A1.
                                                                                                                                                 Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    17-JUN-2004
                                                                                                                                                                                                                        01-APR-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ADL34572;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          RESULT 285
```

```
This invention describes a novel antisense oligonucleotides which specifically hybridises to and inhibits the expression of human phosphoinositide-3-kinase, regulatory subunit 4, p150. The phosphoinositide-3-kinase, regulatory subunit 4, p150. The coligonucleotides comprises at least one modified internucleoside linkage, preferably a phosphorothioate linkage. It also comprises at least one modified sugar moiety, preferably a 2'-O-methoxyethyl sugar moiety. The confised sugar moiety, preferably a 2'-O-methoxyethyl sugar moiety. The nucleobase, preferably a 5-methylycvesine. The antisense oligonucleotide can be used in diagnostics and as research reagents and kits. It can also be used prophylactically, e.g. to prevent or delay infection, condition associated with phosphoinositide-3-kinase, regulatory can condition associated with phosphoinositide-3-kinase, regulatory can subunit 4, p150, e.g. hyperproliferative disorder. The products of the invention are immunomodulators with cytostatic activity and can be used
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          antisense; inhibitor; hybridisation; human; phosphoinositide-3-kinase; regulatory subunit 4; p150; internucleoside linkage; phosphorothioate linkage; 2'-0-methoxyethyl sugar; 5-methylcytosine; infection; inflammation; tumour formation; hyperproliferative disorder;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               New antisense compound targeted to a nucleic acid molecule encoding phosphoinositide-3-kinase, regulatory subunit 4, p150, useful for treating cancer, Chediak-Higashi syndrome or a metabolic disorder.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           0.4%; Score 20; DB 1; Length 20;
100.0%; Pred. No. 1.4e+02;
tive 0; Mismatches 0; Indels
                                                                                                                                                          /mod_base= OTHER
/note= "phosphorothioate backbone"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Sequence 20 BP; 8 A; 3 C; 2 G; 7 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ISIS antisense oligonucleotide ISIS 206967.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Example 15; SEQ ID NO 18; 60pp; English.
                                                        Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           631 GATATTCATGACTTTGAATA 650
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      GATATTCATGACTTTGAATA 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ВР.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 31-MAY-2002; 2002US-00160786.
                                                                                                                                                                                                                                                                                                                                                                                                  18-SEP-2003; 2003US-00667022
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ADL34575 standard; DNA; 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             17-JUN-2004 (first entry)
                                                                                                                                 ๙
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Local Similarity 100.
les 20; Conservative
                                                                                           . .20
*tag=
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Dobie KW;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              WPI; 2004-282523/26.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                (FREI/) FREIER S M.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   (DOBI/) DOBIE K W.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       for gene therapy
                                                                                                                                                                                                                                                                   US2004063657-A1.
                                                                                              modified base
                                                                                                                                                                                                                                                                                                                                      01-APR-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Freier SM,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ADL34575;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             20
Synthetic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Query Match
```

ö

à g

```
Dobie KW;
                                                                                                                                                                                                                                                                                                                                      WPI; 2004-282523/26.
                                                                                                                                                                                                                                                                       (FREI/) FREIER S M.
                                                                                                                                                                                                                                                                                     (DOBI/) DOBIE K W.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      for gene therapy
                                                                                                                                                            US2004063657-A1
                                                                               Key
modified_base
                                                                                                                                                                                        01-APR-2004
                                                                                                                                                                                                                                                                                                              Freier SM,
                                                      Synthetic.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ADL34625;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 RESULT 288
 ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             This invention describes a novel antisense oligonucleotides which specifically hybridiess to and inhibits the expression of human phosphoinositide-3-kinase, regulatory subunit 4, pi50. The oligonucleotide comprises at least one modified internucleoside linkage, preferably a phosphorothioate linkage. It also comprises at least one modified sugar molety, preferably a 2-O-methoxyethyl sugar molety. The antisense oligonucleotide further comprises at least one modified nucleobase, preferably a 5-methylcytosine. The antisense oligonucleotide further comprises at least one modified nucleobase, preferably a 5-methylcytosine. The antisense oligonucleotide in inappostics and as research reagents and kits. It can also be used prophylactically, e.g. to prevent or delay infection, inflammation or tumour formation. It can also be used to treat a disease or condition associated with phosphoinositide-3-kinase, regulatory chediak-Higashi syndrome or a metabolic disorder, preferably cancer, invention are immunomodulators with cytostatic activity and can be used
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  antisense; inhibitor; hybridisation; human; phosphoinositide-3-kinase; regulatory subunit 4; p150; internucleoside linkage; phosphorothioate linkage; 2'-0-methoxyethyl sugar; 5-methylcytosine;
Chediak-Higashi syndrome; metabolic disorder; immunomodulator;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Gaps
                                                                                                                                                                                                                                                                                                                                                    New antisense compound targeted to a nucleic acid molecule encodin
phosphoinositide-3-kinase, regulatory subunit 4, p150, useful for
treating cancer, Chediak-Higashi syndrome or a metabolic disorder.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Query Match 0.4%; Score 20; DB 1; Length 20; Best Local Similarity 100.0%; Pred. No. 1.4e+02; Matches 20; Conservative 0; Mismatches 0; Indels
                                                                                                                     /note= "phosphorothioate backbone"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Seguence 20 BP; 2 A; 7 C; 3 G; 8 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ISIS antisense oligonucleotide ISIS 206996.
                                                                                                                                                                                                                                                                                                                                                                                                         Example 15; SEQ ID NO 21; 60pp; English.
              cytostatic; gene therapy; ss; primer
                                                                Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 780 GGAGGAACTGAAAATCAGGC 799
                                                                                                       /mod_base= OTHER
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               GGAGGAACTGAAAATCAGGC 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ВР
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AD134604/C
ID AD134604 standard; DNA; 20 BP
XC AD134604;
XX
DT 17-JUN-2004 (first entry)
XX
DE ISIS antisense oligonucleotid
XX
XX
W antisense; inhibitor; hybridi
XW antisense; inhibitor; hybridi
XW regulatory subunit 4; p150; i
XW phosphorothioate linkage; 2'-'-
                                                                                                                                                                                                    18-SEP-2003; 2003US-00667022.
                                                                                                                                                                                                                              31-MAY-2002; 2002US-00160786.
                                                                              1. .20
/*tag= a
                                                                                                                                                                                                                                                                                               Freier SM, Dobie KW;
                                                                                                                                                                                                                                                                                                                           WPI; 2004-282523/26.
                                                                                                                                                                                                                                                      (FREI/) FREIER S M. (DOBI/) DOBIE K W.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         or gene therapy
                                                                                                                                              JS2004063657-A1
                                                                Key
modified_base
                                                                                                                                                                         01-APR-2004.
                                       Synthetic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          20
셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ઠ
```

```
This invention describes a novel antisense oligonucleotides which specifically hybridises to and inhibits the expression of human phosphoinositide-3-kinase, regulatory subunit 4, pl50. The oligonucleotides comprises at least one modified internucleoside linkage, preferably a phosphorothioate linkage. It also comprises at least one modified sugar molety, preferably a 2'-O-methoxyethyl sugar molety. The antisense oligonucleotide further comprises at least one modified nucleobase, preferably a 5-methylcytosine. The antisense oligonucleotide further comprises at least one modified can be used in diagnostics and as research reagents and kits. It can also be used prophylactically, e.g. to prevent or delay infection, inflammation or tumour formation. It can also be used to treat a disease or condition associated with phosphoinositide-3-kinase, regulatory conduction, and syndrome or a metabolic disorder. The products of the invention are immunomodulators with cytostatic activity and can be used
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ö
infection; inflammation; tumour formation; hyperproliferative disorder; cancer; Chediak-Higashi syndrome; metabolic disorder; immunomodulator; cytostatic; gene therapy; 88; primer.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          antisense; inhibitor; hybridisation; human; phosphoinositide-3-kinase; regulatory subunit 4; p150; internucleoside linkage;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              New antisense compound targeted to a nucleic acid molecule encoding phosphoinositide-3-kinase, regulatory subunit 4, p150, useful for treating cancer, Chediak-Higashi syndrome or a metabolic disorder.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       4%; Score 20; DB 1; Length 20; 0.0%; Pred. No. 1.4e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                 /note= "phosphorothioate backbone"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Sequence 20 BP; 8 A; 2 C; 6 G; 4 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       0.4%; ...
y 100.0%; Pred. No. ...
'''e 0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ISIS antisense oligonucleotide ISIS 207025.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Example 15; SEQ ID NO 50; 60pp; English.
                                                                                                                                                                                                                                       Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  2555 TCCTGTGTCATCCCAATTTA 2574
                                                                                                                                                                                                                                                                           1. .20
/*tag= a
/mod_base= OTHER
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TCCTGTGTCATCCCAATTTA 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ADL34625 standard, DNA; 20 BP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                18-SEP-2003; 2003US-00667022
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             31-MAY-2002; 2002US-00160786.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   17-JUN-2004 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Matches 20; Conservative
```

```
This invention describes a novel antisense oligonucleotides which specifically hybridises to and inhibits the expression of human phosphoinositide 3-Kinase, regulatory subunit 4, p150. The phosphoinositide 3-Kinase, regulatory subunit 4, p150. The oligonucleotides comprises at least one modified internucleoside linkage, or disponucleotides comprises. It also comprises at least one modified sugar moiety, preferably a 2'-Omethoxyethyl sugar moiety. The antisense oligonucleotide further comprises at least one modified and such a season of the antisense oligonucleotide can be used in diagnostics and as research reagents and kits. It can also be used prophylactically, e.g. to prevent or delay infection, inflammation or tumour formation. It can also be used to treat a disease or condition associated with phosphoinositide-3-kinase, regulatory subunit 4, p150, e.g. hyperproliferative disorder, preferably cancer, chediak-Higashi syndrome or a metabolic disorder. The products of the invention are immunomodulators with cytostatic activity and can be used
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ö
phosphorothioate linkage, 2'-O-methoxyethyl sugar; 5-methylcytosine, infection; inflammation; tumour formation; hyperproliferative disorder; cancer; Chediak-Higashi syndrome; metabolic disorder; immunomodulator; cytostatic; gene therapy; ss; primer.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    antisense; inhibitor; hybridisation; human; phosphoinositide-3-kinase;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               New antisense compound targeted to a nucleic acid molecule encoding phosphoinositide-3-kinase, regulatory subunit 4, p150, useful for treating cancer, Chediak-Higashi syndrome or a metabolic disorder.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      0.4%; Score 20; DB 1; Length 20;
100.0%; Pred. No. 1.4e+02;
tive 0; Mismatches 0; Indels
                                                                                                                                                                                                      note= "phosphorothioate backbone"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Sequence 20 BP; 7 A; 7 C; 4 G; 2 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ISIS antisense oligonucleotide ISIS 207034.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Example 15; SEQ ID NO 71; 60pp; English.
                                                                                                                                 Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    3927 TCTGGTTGGCTGGGACCTTA 3946
                                                                                                                                                    1. .20
/*tag= a
/mod_base= OTHER
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TCTGGTTGGCTGGGACCTTA 1
                                                                                                                                                                                                                                                                                                                                                       31-MAY-2002; 2002US-00160786.
                                                                                                                                                                                                                                                                                                                    18-SEP-2003; 2003US-00667022
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ADL34634 standard; DNA; 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                20; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                              Freier SM, Dobie KW;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   WPI; 2004-282523/26.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Query Match
Best Local Similarity
Matches 20; Conserv
                                                                                                                                                                                                                                                                                                                                                                                           (FREI/) FREIER S M. (DOBI/) DOBIE K W.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         for gene therapy.
                                                                                                                                                                                                                                            US2004063657-A1
                                                                                                                                     Key
modified_base
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      17-JUN-2004
                                                                                                                                                                                                                                                                                01-APR-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ADL34634;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        20
                                                                                                 Synthetic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                RESULT 289
           g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    0×2×5×8×2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        8
```

```
This invention describes a novel antisense oligomucleotides which specifically hybridises to and inhibits the expression of human phosphoinositide-3-kinase, regulatory subunit 4, piso. The phosphoinositide-3-kinase, regulatory subunit 4, piso. The coligomucleotides comprises at least one modified internucleoside linkage, preferably a phosphorothioate linkage. It also comprises at least one carisense oligomucleotide further comprises at least one modified sugar modety, preferably a 2'-O-methoxyethyl sugar modety. The nucleobase, preferably a 5-methoxyethyl sugar modety. The nucleobase, preferably a senestynes at least one modified nucleobase, preferably a senestynes at least one modified can be used in diagnostics and as research reagents and kits. It can also be used prophylactically, e.g. to prevent or delay infection, inflammation or tumour formation. It can also be used to treat a disease or condition associated with phosphoinositide-3-kinase, regulatory subunit 4, piso, e.g. hyperproliferative disorder, preferably cancer, chediak-Higashi syndrome or a metabolic disorder. The products of the invention are immunomodulators with cytostatic activity and can be used
regulatory subunit 4; p150; internucleoside linkage; phosphorothioate linkage; 2'-O-methoxyethyl sugar; 5-methylcytosine; infection; inflammation; tumour formation; hyperproliferative disorder; cancer; Chediak-Higashi syndrome; metabolic disorder; immunomodulator; cytostatic; gene therapy; ss; primer.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Phosphoinositide-3-kinase regulatory subunit 4 p150 fragment 124606.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         New antisense compound targeted to a nucleic acid molecule encoding phosphoinositide-3-kinase, regulatory subunit 4, p150, useful for treating cancer, Chediak-Higashi syndrome or a metabolic disorder.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Length 20;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Indels
                                                                                                                                                                                                                       /note= "phosphorothioate backbone"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Sequence 20 BP; 6 A; 6 C; 1 G; 7 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         0.4%; Score 20; DB 1; Le
00.0%; Pred. No. 1.4e+02;
ve 0; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Example 15; SEQ ID NO 80; 60pp; English.
                                                                                                                                                   Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TGAAAATAAGGTTTTGGGAC 4374
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  0.10
100.08; Pic
                                                                                                                                                                                                          /mod_base= OTHER
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TGAAATAAGGTTTTTGGGAC 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 BP
                                                                                                                                                                                                                                                                                                                                   18-SEP-2003; 2003US-00667022.
                                                                                                                                                                                                                                                                                                                                                                   31-MAY-2002; 2002US-00160786
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    (first entry)
                                                                                                                                                                                           ď
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    20; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ADL34653 standard; DNA;
                                                                                                                                                                      1. .20
/*tag=
                                                                                                                                                                                                                                                                                                                                                                                                                                                             Dobie KW;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              WPI; 2004-282523/26.
                                                                                                                                                                                                                                                                                                                                                                                                          (FREI/) FREIER S M.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                         (DOBI/) DOBIE K W.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               for gene therapy.
                                                                                                                                                                                                                                                              US2004063657-A1
                                                                                                                                                                        modified base
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    17-JUN-2004
                                                                                                                                                                                                                                                                                                 01-APR-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                               Freier SM,
                                                                                                                     Synthetic.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ADL34653;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         4355
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               RESULT 290
ADL34653
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   0 x 2 x 5 x 8 x
              Š
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         d
```

cytostatic; gene therapy; ds.

```
셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    This invention describes a novel antisense oligonucleotides which specifically hybridises to and inhibits the expression of human phosphoinositide-3-kinase, regulatory subunit 4, p150. The phosphoinositide-3-kinase at least one modified internucleoside linkage, preferably a phosphorothioate linkage. It also comprises at least one moiety modified sugar moiety, preferably a 2-O-methoxyethyl sugar moiety. The antisense oligonucleotide further comprises at least one moiety. The nucleobase, preferably a 5-methylcytosine. The antisense oligonucleotide can be used in diagnosetics and as research reagents and kits. It can also inflammation or tumour formation. It can also be used prophylactically, e.g. to prevent or delay infection, inflammation or tumour formation. It can also be used to treat a disease or condition associated with phosphoinositide-3-kinase, regulatory chediak-Higashi syndrome or a metabolic disorder. The products of the invention are immunomodulators with cytostatic activity and can be used
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ö
antisense; inhibitor; hybridisation; human; phosphoinositide-3-kinase; regulatory subunit 4; p150; internucleoside linkage; phosphorothioate linkage; 2'-O-methoxyethyl sugar; S-methylcytosine; infection; inflammation; tumour formation; hyperproliferative disorder; cancer; Chediak-Higashi syndrome; metabolic disorder; immunomodulator;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  antigense; inhibitor; hybridisation; human; phosphoinositide-3-kinase; regulatory subunit 4; p150; internucleoside linkage; phosphorothioate linkage; 2'-O-methoxysthyl sugar; 5-methylcytosine; infection; inflammation; tumour formation; hyperproliferative disorder; cancer; Chediak-Higashi syndrome; metabolic disorder; immunomodulator;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 New antisense compound targeted to a nucleic acid molecule encoding phosphoinositide-3-kinase, regulatory subunit 4, p150, useful for treating cancer, Chediak-Higashi syndrome or a metabolic disorder.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Phosphoinositide-3-kinase regulatory subunit 4 p150 fragment 124630
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        0.4%; Score 20; DB 1; Length 20; 100.0%; Pred. No. 1.4e+02; ive 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Sequence 20 BP; 5 A; 7 C; 2 G; 6 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Example 15; SEQ ID NO 99; 60pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    914 CCCGTCCATTCTTGAATAAC 933
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CCCGTCCATTCTTGAATAAC 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ADL34670 standard; DNA; 20 BP
                                                                                                                                                                                                                                                                                                                                                    18-SEP-2003; 2003US-00667022.
                                                                                                                                                                                                                                                                                                                                                                                                        31-MAY-2002; 2002US-00160786.
                                                                                                                                    cytostatic; gene therapy; ds
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Freier SM, Dobie KW;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            WPI; 2004-282523/26.
                                                                                                                                                                                                                                                                                                                                                                                                                                                          (FREI/) FREIER S M. (DOBI/) DOBIE K W.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Local Similarity
nes 20; Conserv
                                                                                                                                                                                                                                             JS2004063657-A1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     for gene therapy
                                                                                                                                                                                            Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            17-JUN-2004
                                                                                                                                                                                                                                                                                               01-APR-2004.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ADL34670;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    RESULT 291
```

ò 셤

```
This invention describes a novel antisense oligonucleotides which specifically hybridises to and inhibits the expression of human phosphoinositided-1*timase, regulatory subunit 4, p150. The phosphoinositided-1*timase, regulatory subunit 4, p150. The coligonucleotides comprises at least one modified internucleoside linkage, preferably a phosphorothioate linkage. It also comprises at least one modified sugar molety, preferably a 2'-O-methoxyethyl sugar molety. The antisense oligonucleotide further comprises at least one modified sugar molety. The can be used in diagnostics and as research reagents and kits. It can also be used prophylactically, e.g. to prevent or delay infection, inflammation or tumour formation. It can also be used to treat a disease condition associated with phosphoinositide-3-kinase, regulatory condition associated with phosphoinositide-13-kinase, regulatory cancer, chediak-Higashi syndrome or a metabolic disorder. The products of the invention are immunomodulators with cytostatic activity and can be used
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         antisense; inhibitor; hybridisation; human; phosphoinositide-3-kinase; regulatory subunit 4; pl50; internucleoside linkage; phosphorothioate linkage; 2'.O-methoxyethyl sugar; 5-methylcytosine; infection; inflammation; tumnour formation; hyperproliferative disorder; cancer; Chediak-Higashi syndrome; metabolic disorder; immunomodulator;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                     New antisense compound targeted to a nucleic acid molecule encoding
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Phosphoinositide-3-kinase regulatory subunit 4 p150 fragment 124638.
                                                                                                                                                                                                                                                                                                                                                                                                                                                           phosphoinositide-3-kinase, regulatory subunit 4, p150, useful for treating cancer, Chediak-Higashi syndrome or a metabolic disorder.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      .
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Query Match 0.4%; Score 20; DB 1; Length 20; Best Local Similarity 100.0%; Pred. No. 1.4e+02; Matches 20; Conservative 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Sequence 20 BP; 5 A; 1 C; 6 G; 8 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Example 15; SEQ ID NO 116; 60pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 2438 TTAGTGATGCTGAGGAATTT 2457
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         BP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   cytostatic; gene therapy; ds.
                                                                                                                                                                              18-SEP-2003; 2003US-00667022.
                                                                                                                                                                                                                            31-MAY-2002; 2002US-00160786.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ADL34678 standard; DNA; 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       17-JUN-2004 (first entry)
                                                                                                                                                                                                                                                                                                                                            Dobie KW;
                                                                                                                                                                                                                                                                                                                                                                                        WPI; 2004-282523/26.
                                                                                                                                                                                                                                                                         (FREI/) FREIER S M.
                                                                                                                                                                                                                                                                                                 (DOBI/) DOBIE K W.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               for gene therapy.
                                                                                      US2004063657-A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            US2004063657-A1
                                             Ното варіелв
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Homo sapiens
                                                                                                                                      01-APR-2004
                                                                                                                                                                                                                                                                                                                                            Freier SM,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ADL34678;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    RESULT 292
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ADL34678
```

```
31-MAY-2002; 2002US-00160786
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   RESULT 294
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ADL34565/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     셤
                                                                                                                                                                                                                                                                                                                 This invention describes a novel antisense oligonucleotides which specifically hybridises to and inhibits the expression of human phosphoinositide. Stimase, regulatory subunit 4, p150. The oligonucleotides comprises at least one modified internucleoside linkage, oligonucleotides comprises at least to comprises at least one modified sugar moiety, preferably a 2-0-methoxyethyl sugar moiety. The antisense oligonucleotide further comprises at least one moiffied uncleobase, preferably a 5-methylcytosine. The antisense oligonucleotide con be used in diagnostics and as research reagents and kits. It can also be used prophylactically, e.g. to prevent or delay infection, inflammation or tumour formation. It can also be used to treat a disease or condition associated with phosphoinositide-1-kinae, regulatory subunit 4, p150, e.g. hyperproliferative disorder, preferably cancer, chediak-Higashi syndrome or a metabolic disorder. The products of the invention are immunomodulators with cytostatic activity and can be used
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        antisense; inhibitor; hybridisation; human; phosphoinositide-3-kinase; regulatory subunit 4; p150; internucleoside linkage; phosphorothioare linkage; 2'-O-methoxyethyl sugar; 5-methylcytosine; infection; inflammation; themour formation; hyperproliferative disorder; cancer; Chediak-Higashi syndrome; metabolic disorder; immunomodulator;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Phosphoinositide-3-kinase regulatory subunit 4 p150 fragment 124667.
                                                                                                                                                                                                                         New antisense compound targeted to a nucleic acid molecule encoding phosphoinositide-3-kinase, regulatory subunit 4, p150, useful for treating cancer, Chediak-Higashi syndrome or a metabolic disorder.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ô
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         0.4%; Score 20; DB 1; Length 20; 100.0%; Pred. No. 1.4e+02; ative 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Sequence 20 BP; 7 A; 2 C; 5 G; 6 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                            Example 15; SEQ ID NO 124; 60pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          3009 TCAGAAAGGTGTAATTGACT 3028
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1 TCAGAAAGGTGTAATTGACT 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ADL34698 standard; DNA; 20 BP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      18-SEP-2003; 2003US-00667022.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               cytostatic; gene therapy; ds
                                                     18-SEP-2003; 2003US-00667022.
                                                                                   31-MAY-2002; 2002US-00160786.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     17-JUN-2004 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Query Match
Best Local Similarity 100.
Matches 20; Conservative
                                                                                                                                                                  Freier SM, Dobie KW;
                                                                                                                                                                                                WPI; 2004-282523/26.
                                                                                                                    (FREI/) FREIER S M. (DOBI/) DOBIE K W.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     for gene therapy.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            US2004063657-A1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          01-APR-2004
                        01-APR-2004.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ADL34698;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           RESULT 293
```

d

ð

```
This invention describes a novel antisense oligomucleotides which specifically hybridises to and inhibits the expression of human specifically hybridises to and inhibits the expression of human phosphoinositide 3-kinase, regulatory subunit 4, piso. The phosphoinositide of an international international international international preferably a phosphorothicate linkage. It also comprises at least one modified sugar molety, preferably a 2'-O-methoxyethyl sugar molety. The modified sugar molety, preferably a 2'-O-methoxyethyl sugar molety. The nucleobase, preferably a S-methylcytosine. The antisense oligonucleotide nucleobase, preferably a senesarch reagents and kits. It can also be used prophylactically, e.g. to prevent or delay infection, inflammation or tumour formation. It can also be used to treat a disease or condition associated with phosphoinostitide-3-kinase, regulatory subunit 4, piso, e.g. hyperproliferative disorder, preferably cancer, caubunit 4, piso, e.g. hyperproliferative disorder. The products of the invention are immunomodulators with cytostatic activity and can be used
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      antisense; inhibitor; hybridisation; human; phosphoinositide-3-kinase; regulatory subunit 4; p150; internucleoside linkage; phosphorothioate linkage; 2'-O-methoxyeteltyl sugar; 5-methylcytosine; infection; inflammation; tumour formation; hyperproliferative disorder; cancer; Chedlak-Higashi syndrome; metabolic disorder; immunomodulator; cytostatic; gene therapy; ss; primer.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Gaps
                                                                                                                                                                                                                 New antisense compound targeted to a nucleic acid molecule encoding phosphoinositide-3-kinase, regulatory subunit 4, p150, useful for treating cancer, Chediak-Higashi syndrome or a metabolic disorder.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Length 20;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             /mod_base= OTHER
/note= "phosphorothioate backbone"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Sequence 20 BP; 4 A; 5 C; 4 G; 7 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Score 20; DB 1; Lt
Pred. No. 1.4e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ISIS antisense oligonucleotide ISIS 206957.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          100.0%; Pred. No.
                                                                                                                                                                                                                                                                                                                                                                Example 15; SEQ ID NO 144; 60pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      4761 CTGTTTCATGACTGACTGAC 4780
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1 cretricardacidacidae 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       18-SEP-2003; 2003US-00667022
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        0.4%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ADL34565 standard; DNA; 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      17-JUN-2004 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ď
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Local Similarity 100.
nes 20; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            /*tag=
                                                                                                     Freier SM, Dobie KW;
                                                                                                                                                             WPI; 2004-282523/26.
(FREI/) FREIER S M. (DOBI/) DOBIE K W.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           for gene therapy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                US2004063657-A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Key
modified_base
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           01-APR-2004.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Synthetic.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ADL34565;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Query Match
```

```
New antisense compound targeted to a nucleic acid molecule encodir
phosphoinositide-3-kinase, regulatory subunit 4, p150, useful for
treating cancer, Chediak-Higashi syndrome or a metabolic disorder.
  18-SEP-2003; 2003US-00667022.
                           31-MAY-2002; 2002US-00160786.
                                                                                            Dobie KW;
                                                                                                                   WPI; 2004-282523/26.
                                                    (FREI/) FREIER S M. (DOBI/) DOBIE K W.
                                                                                                                                                                                                                                                                                                                                                                                                                               for gene therapy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        US2004063657-A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       nodified base
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Local Sim
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   17-JUN-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  01-APR-2004
                                                                                           Freier SM,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Synthetic.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ADL34580;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    RESULT 296
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      8
                                                                                                                                                                                                       This invention describes a novel antisense oligonucleotides which specifically hybridises to and inhibits the expression of human phosphoinositide-3-kinase, regulatory subunit 4, piso. The oligonucleotides comprises at least one modified internucleoside linkage, preferably a phosphorothioate linkage. It also comprises at least one modified augar molety, preferably a 2-0-methoxyethyl sugar molety. The antisense oligonucleotide further comprises at least one modified antisense oligonucleotide further comprises at least one molified antisense oligonucleotide further comprises at least one molified on uncleobase, preferably a 5-methylcytosine. The antisense oligonucleotide can be used in diagnostics and as research reagents and kite. It can also be used prophylactically, e.g. to prevent or delay infection, inflammation or tumour formation. It can also be used to treat a disease or condition associated with phosphoinositide-3-kinase, regulatory subunit 4, piso, e.g. hyperproliferative disorder, preferably cancer, chediak Higashi syndrome or a metabolic disorder. The products of the invention are immunomodulators with cytostatic activity and can be used
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ô
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    antisense; inhibitor; hybridisation; human; phosphoinositide-3-kinase; regulatory subunit 4; plS0; internucleoside linkage; phosphorothioace linkage; 2'-O-methoxyethyl sugar; 5-methylcytosine; infection; inflammation; tumour formation; hyperproliferative disorder; cancer; Chediak-Higashi syndrome; metabolic disorder; immunomodulator; cytostatic; gene therapy; ss; primer.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Gaps
                                                                                                                              New antisense compound targeted to a nucleic acid molecule encoding phosphoinositide-3-kinase, regulatory subunit 4, p150, useful for treating cancer, Chediak-Higashi syndrome or a metabolic disorder.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 0.4%; Score 20; DB 1; Length 20;
100.0%; Pred. No. 1.4e+02;
iive 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 /note= "phosphorothioate backbone"
                                                                                                                                                                                                                                                                                                                                                                                                                                          Sequence 20 BP; 5 A; 8 C; 5 G; 2 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ISIS antisense oligonucleotide ISIS 206970.
                                                                                                                                                                                 Example 15; SEQ ID NO 11; 60pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1. .20
/*tag= a
/mod_base= OTHER
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       62
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CGTTTGCTGGGGCTGCAGCA 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CGTTTGCTGGGGCTGCAGCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ADL34578 standard; DNA; 20 BP
             31-MAY-2002; 2002US-00160786.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Conservative
                                                                             Freier SM, Dobie KW;
                                                                                                      WPI; 2004-282523/26.
                                     (FREI/) FREIER S M. (DOBI/) DOBIE K W.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                 for gene therapy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         US2004063657-A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Key
modified_base
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Local Sin
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     17-JUN-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    01-APR-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Synthetic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ADL34578;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       43
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 RESULT 295
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Matches
셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ઠ
```

```
This invention describes a novel antisense oligonucleotides which specifically hybridises to and inhibits the expression of human probabolinositided. *Kinase, regulatory subunit 4, p150. The phosphoinositided. *Kinase, regulatory subunit 4, p150. The coligonucleotides comprises at least one modified internucleoside linkage, preferably a phosphorothioate linkage. It also comprises at least one modified sugar molety, preferably a 2'-O-methoxyethyl sugar molety. The antisense oligonucleotide further comprises at least one modified nucleobase, preferably a 5-methylcycosine. The antisense oligonucleotide can be used in diagnostics and as research reagents and kits. It can also be used prophylactically, e.g. to prevent or delay infection.

Cinflammation or tumour formation. It can also be used to treat a disease condition associated with phosphoinositide-3-kinase, regulatory subunit 4, p150, e.g. hyperprofiferative disorder, preferably cancer, chediak-Higashi syndrome or a metabolic disorder. The products of the invention are immunomodulators with cytostatic activity and can be used
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   antisense; inhibitor; hybridisation; human; phosphoinositide-3-kinase; regulatory subunit 4; p150; internucleoside linkage; phosphorothioate linkage; 2'-O-methoxyethyl sugar; 5-methylcytosine; infection; inflammation; tumour formation; hyperproliferative disorder; cancer; Chediak-Higashi syndrome; metabolic disorder; immunomodulator; cytostatic; gene therapy; ss; primer.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Gape
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Length 20;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 /note= "phosphorothioate backbone"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Sequence 20 BP; 6 A; 2 C; 7 G; 5 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Score 20; DB 1; Le
Pred. No. 1.4e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ISIS antisense oligonucleotide ISIS 206972.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         0; Mismatches
Example 15; SEQ ID NO 24; 60pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             914 CCCGTCCATTCTTGAATAAC 933
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   /mod_base= OTHER
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         20 ccccrccarrcrrcaaraac 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ADL34580 standard; DNA; 20 BP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               100.08;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             0.48;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ø
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1. .20
/*tag=
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Similarity
```

```
This invention describes a novel antisense oligonucleotides which specifically hybridises to and inhibits the expression of human specifically hybridises to and inhibits the expression of human to phosphoinositide—3-kinase, regulatory subunit 4, p150. The oligonucleotides comprises at least one modified internucleoside linkage. Comprises at least one modified sugar moiety, preferably a 2'-0-methoxyethyl sugar moiety. The modified sugar moiety, preferably a 2'-0-methoxyethyl sugar moiety. The modified sugar moiety, preferably a 2'-0-methoxyethyl sugar moiety. The nucleobase, preferably a S-methylycytosine. The antisense oligonucleotide can be used in diagnostics and as research reagents and kits. It can also be used prophylactically, e.g. to prevent or delay infection, inflammation or tumour formation. It can also be used to treat a disease or condition associated with phosphoinositide—3-kinase, regulatory subunit 4, p150, e.g. hyperproliferative disorder, preferably cancer, chediak-Higashi syndrome or a metabolic disorder. The products of the invention are immunomodulators with cytostatic activity and can be used
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                antisense; inhibitor; hybridisation; human; phosphoinositide-3-kinase; regulatory subunit 4; pl50; internucleoside linkage; phosphorchinoste linkage; 2'-O-methoxyethyl sugar; 5-methylcytosine; infection; inflammation; tumour formation; hyperproliferative disorder; cancer; Chediak-Higashi syndrome; metabolic disorder; immunomodulator;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Gaps
                                                                                                                                                                                                                      New antisense compound targeted to a nucleic acid molecule encoding phosphoinositide 3-kinase, regulatory subunit 4, p150, useful for treating cancer, Chediak-Higashi syndrome or a metabolic disorder.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        .
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Query Match

0.4%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 1.4e+02;
Matches 20; Conservative 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           /note= "phosphorothioate backbone"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Sequence 20 BP; 5 A; 6 C; 4 G; 5 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ISIS antisense oligonucleotide ISIS 207042.
                                                                                                                                                                                                                                                                                                     Example 15; SEQ ID NO 26; 60pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        cytostatic; gene therapy; ss; primer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               998 TICGICATGGGGACATCAAG 1017
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1. .20
/*tag= a
/mod_base= OTHER
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   20 rrcercarececacarcase 1
                  18-SEP-2003; 2003US-00667022
                                                31-MAY-2002; 2002US-00160786
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ADL34642 standard; DNA; 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               (first entry)
                                                                                                                                                    Freier SM, Dobie KW;
                                                                                                                                                                                     WPI; 2004-282523/26.
                                                                                         (FREI/) FREIER S M. (DOBI/) DOBIE K W.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          for gene therapy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    US2004063657-A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Key
modified_base
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               17-JUN-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Synthetic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ADL34642;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               RESULT 297
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ò
```

```
This invention describes a novel antisense oligonucleotides which specifically hybridises to and inhibits the expression of human specifically hybridises to and inhibits the expression of human phosphoinositide 3-kinase, regulatory subunit 4, p150. The coligonucleotides comprises at least to me modified internucleoside linkage. It also comprises at least one modified sugar moiety, preferably a 2'-O-methoxyethyl sugar moiety. The modified sugar moiety, preferably a 2'-O-methoxyethyl sugar moiety. The nucleobase, preferably a 5-methylycosine. The antisense oligonucleotide can be used in diagnostics and as research reagents and kits. It can also be used prophylactically, e.g. to prevent or delay infection, inflammation or tumour formation. It can also be used to treat a disease or condition associated with phosphoinositide-1-kinase, regulatory subunit 4, p150, e.g. hyperproliferative disorder, preferably cancer, chediak-Higashi syndrome or a metabolic disorder. The products of the invention are immunomodulators with cytostatic activity and can be used
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        antisense; inhibitor; hybridisation; human; phosphoinositide-3-kinase; regulatory subunit 4; p150; internucleoside linkage; phosphorothioace linkage; 2'-O-methoxystehyl sugar; 5-methylcytosine; infection; inflammation; tumour formation; hyperproliferative disorder; cancer; Chediak-Higashi syndrome; metabolic disorder; immunomodulator;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Phosphoinositide-3-kinase regulatory subunit 4 p150 fragment 124595.
                                                                                                                                                                                                                                            compound targeted to a nucleic acid molecule encoding
                                                                                                                                                                                                                                                  New antisense compound targeted to a nucleic acid molecule encodir
phosphoinositide-3-kinase, regulatory subunit 4, p150, useful for
treating cancer, Chediak-Higashi syndrome or a metabolic disorder.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   0.4%; Score 20; DB 1; Length 20; 100.0%; Pred. No. 1.4e+02; ative 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Sequence 20 BP; 8 A; 3 C; 5 G; 4 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                            Example 15; SEQ ID NO 88; 60pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     4823 CTTATGCATCTTTTGCAAG 4842
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              20 CTTATGCATCTCTTTGCAAG 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ADL34645 standard; DNA; 20 BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       18-SEP-2003; 2003US-00667022
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               31-MAY-2002; 2002US-00160786
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   cytostatic; gene therapy; ds
                                                                       31-MAY-2002; 2002US-00160786.
                                     18-SEP-2003; 2003US-00667022
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         17-JUN-2004 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Best Local Similarity 100.
Matches 20; Conservative
                                                                                                                                                                        Freier SM, Dobie KW;
                                                                                                                                                                                                           WPI; 2004-282523/26.
                                                                                                            (FREI/) FREIER S M. (DOBI/) DOBIE K W.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 for gene therapy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               US2004063657-A1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       01-APR-2004.
01-APR-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ADL34645;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          RESULT 298
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ADL34645
  ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                셤
```

```
RESULT 300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ADL34676
  셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ઠ
                                                                                                                                                                                                                                                                                                           This invention describes a novel antisense oligonucleotides which specifically hybridises to and inhibits the expression of human phosphoinositide-3-kinase, regulatory subunit 4, piso. The oligonucleotides comprises at least one modified internucleoside linkage, preferably a phosphorothioate linkage. It also comprises at least one modified sugar molety, preferably a 2-0-methoxyethyl sugar molety. The antisense oligonucleotide further comprises at least one modified nucleobase, preferably a 5-methylcytosine. The antisense oligonucleotide can be used in diagnostics and as research reagents and kits. It can also be used prophylactically, e.g. to prevent or delay infection, inflammation or tumour formation. It can also be used to treat a disease condition associated with phosphoinositide-3-kinase, regulatory subunit 4, piso, e.g. hyperproliferative disorder, preferably cancer, chediak Higashi syndrome or a metabolic disorder. The products of the invention are immunomodulators with cytostatic activity and can be used
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    antisense; inhibitor; hybridisation; human; phosphoinositide-3-kinase; regulatory subunit 4; p150; internucleoside linkage; phosphorothioare linkage; 2'-O-methoxyethyl sugar; 5-methylcytosine; infection; inflammation; tumour formation; hyperproliferative disorder; cancer; Chediak-Higashi syndrome; metabolic disorder; immunomodulator;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Gaps
                                                                                                                                                                            New antisense compound targeted to a nucleic acid molecule encoding phosphoinositide-3-kinase, regulatory subunit 4, p150, useful for treating cancer, Chediak-Higashi syndrome or a metabolic disorder.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Phosphoinositide-3-kinase regulatory subunit 4 p150 fragment 124628.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 0.4%; Score 20; DB 1; Length 20; 100.0%; Pred. No. 1.4e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Sequence 20 BP; 4 A; 7 C; 3 G; 6 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 100.0%; Pred. No.
                                                                                                                                                                                                                                                                        Example 15; SEQ ID NO 91; 60pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          377 AGCCCATCTCCTGTCTATGA 396
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AGCCCATCTCCTGTCTATGA 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ADL34668 standard; DNA; 20 BP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          cytostatic; gene therapy; ds
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      31-MAY-2002; 2002US-00160786
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         18-SEP-2003; 2003US-00667022
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Conservative
                                                                                    Freier SM, Dobie KW;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Dobie KW;
                                                                                                                                    WPI; 2004-282523/26
                     (FREI/) FREIER S M. (DOBI/) DOBIE K W.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  (FREI/) FREIER S M.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        (DOBI/) DOBIE K W.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               US2004063657-A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  17-JUN-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  20;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            01-APR-2004.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Freier SM,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ADL34668;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       RESULT 299
ADL34668
XX
AC ADL3466
XX
XX
DT 17-JUN-
XX
DE Phosph
XX
A INFECT:
XM INFECT:

                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Matches
ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     a
```

```
This invention describes a novel antisense oligonucleotides which specifically hybridises to and inhibits the expression of human probabilities to and inhibits the expression of human to phosphoinositides. It mass, regulatory subunit 4, p150. The coligonucleotides comprises at least one modified internucleoside linkage, preferably a phosphorothioate linkage. It also comprises at least one modified sugar molety, preferably a 2'-O-methoxyethyl sugar molety. The antisense oligonucleotide further comprises at least one modified nucleobase, preferably a 5-methylcytosine. The antisense oligonucleotide can be used in diagnostics and as research reagents and kits. It can also be used prophylactically, e.g. to prevent or delay infection, inflammation or tumour formation. It can also be used to treat a disease condition associated with phosphoinositide-3-kinase, regulatory subunit 4, p150, e.g. hyperproliferative disorder, preferably cancer, chediak-Higashi syndrome or a metabolic disorder. The products of the invention are immunomodulators with cytostatic activity and can be used
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             antisense; inhibitor; hybridisation; human; phosphoinositide-3-kinase; regulatory subunit 4; p150; internucleoside linkage; phosphorothioate linkage; 2'-O-methoxyethyl sugar; 5-methylcytosine; infection; inflammation; tumour formation; hyperproliferative disorder; cancer; Chediak-Higashi syndrome; metabolic disorder; immunomodulator;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Phosphoinositide-3-kinase regulatory subunit 4 p150 fragment 124636.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            New antisense compound targeted to a nucleic acid molecule encoding phosphoinositide-3-kinase, regulatory subunit 4, p150, useful for
New antisense compound targeted to a nucleic acid molecule encodir
phosphoinositide-3-kinase, regulatory subunit 4, p150, useful for
treating cancer, Chediak-Higashi syndrome or a metabolic disorder
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Length 20;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Seguence 20 BP; 9 A; 4 C; 3 G; 4 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Score 20; DB 1; Le
Pred. No. 1.4e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   0.4%; Scc. No. 100.0%; Pred. No. 1. .. 0; Mismatches
                                                                                                                                             Example 15; SEQ ID NO 114; 60pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 2131 CCAAATGGAAATTATGACAC 2150
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1 CCAAATGGAAATTATGACAC 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          18-SEP-2003; 2003US-00667022
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       cytostatic; gene therapy; ds
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                31-MAY-2002; 2002US-00160786
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ADL34676 standard; DNA; 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Dobie KW;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     WPI; 2004-282523/26.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   (FREI/) FREIER S M. (DOBI/) DOBIE K W.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              for gene therapy.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                JS2004063657-A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Ma.
Local Si...
20;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            17-JUN-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       01-APR-2004.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Freier SM,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ADL34676;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Query Match
```

```
This invention describes a novel antisense oligonucleotides which specifically hybridises to and inhibits the expression of human phosphoinositide. *Atmase, regulatory subunit 4, p150. The phosphoinositide of unpurises at least one modified internucleoside linkage, preferably a phosphorothicate linkage. It also comprises at least one modified sugar molety, preferably a 2-0-methoxyethyl sugar molety. The antisense oligonucleotide further comprises at least one modified undechase, preferably a 5-methylcytosine. The antisense oligonucleotide can be used in diagnostics and as research reagents and kite. It can also be used prophylactically, e.g. to prevent or delay infection, inflammation or tumour formation. It can also be used to treat a disease or condition associated with phosphoinositide-3-kinase, regulatory subunit 4, p150, e.g. to prevent disorder, preferably cancer, chediak-Higashi syndrome or a metabolic disorder. The products of the invention are immunomodulators with cytostatic activity and can be used
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        antisense; inhibitor; hybridisation; human; phosphoinositide-3-kinase; regulatory subunit 4; p150; internucleoside linkage; phosphorothioare linkage; 2'-0-methoxysthyl sugar; 5-methylcytosine; infection; inflammation; tumour formation; hyperproliferative disorder; cancer; Chediak-Higashi syndrome; metabolic disorder; immunomodulator;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Phosphoinositide-3-kinase regulatory subunit 4 p150 fragment 124652.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         compound targeted to a nucleic acid molecule encoding
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           phosphoinositide-3-kinase, regulatory subunit 4, p150, useful for treating cancer, Chediak-Higashi syndrome or a metabolic disorder.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         This invention describes a novel antisense oligonucleotides which
treating cancer, Chediak-Higashi syndrome or a metabolic disorder.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ..
                                                                                                                                                                                                                                                                                                                                                                                                                                          Query Match

0.4%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 1.4e+02;
Matches 20; Conservative 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                        Sequence 20 BP; 4 A; 8 C; 3 G; 5 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Example 15; SEQ ID NO 136; 60pp; English.
                                            Example 15; SEQ ID NO 122; 60pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          2860 CCTGCCATAGCACAGCTTCT 2879
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CCTGCCATAGCACAGCTTCT 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               cytostatic; gene therapy; ds
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      31-MAY-2002; 2002US-00160786
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   18-SEP-2003; 2003US-00667022
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ADL34690 standard; DNA; 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Dobie KW;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          WPI; 2004-282523/26.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              (FREI/) FREIER S M. (DOBI/) DOBIE K W.
                                                                                                                                                                                                                                                                                                                                                                            for gene therapy.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           US2004063657-A1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   antisense
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               01-APR-2004.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Freier SM,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            17-JUN-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ADL34690;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               RESULT 301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ADL34690
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ਨੇ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     음
```

```
phosphoinositide-3-kinase to and inhibits the expression of human phosphoinositide-3-kinase, regulatory subunit 4, p150. The coligonucleotides comprises at least one modified internucleoside linkage, preferably a phosphorothicate linkage. It also comprises at least one modified sugar moiety, preferably a 2'-0-methoxyethyl sugar moiety. The modified sugar moiety, preferably a 2'-0-methoxyethyl sugar moiety. The modified gutther comprises at least one modified con thisense oligonucleotide further comprises at least one modified molechase, preferably a 5-methylyvosine. The antisense oligonucleotide can be used in diagnostics and as research reagents and kits. It can also conclude prophylactically, e.g. to prevent or delay infection, inflammation or tumour formation. It can also be used to treat a disease or condition associated with phosphoinositide-3-kinase, regulatory subunit 4, p150, e.g. hyperroliferative disorder, preferably cancer, chediak-Higashi syndrome or a metabolic disorder. The products of the invention are immunomodulators with cytostatic activity and can be used invention are immunomodulators with cytostatic activity and can be used
                                                                                                                                                                                                                                                                                                                                                                                                                                   ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    This invention describes a novel antisense oligonucleotides which specifically hybridises to and inhibits the expression of human phosphoinositide-3-kinase, regulatory subunit 4, p150. The oligonucleotides comprises at least one modified internucleoside linkage, preferably a phosphorothicate linkage. It also comprises at least one modified sugar moiety, preferably a 2'-0-methoxyethyl sugar moiety. The
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  antisense; inhibitor; hybridisation; human; phosphoinositide-3-kinase; regulatory subunit 4; p150; internucleoside linkage; phosphorothioare linkage; 2'-O-methoxyethyl sugar; 5-methylcytosine; infection; inflammation; tumour formation; hyperproliferative disorder; cancer; Chediak-Higashi syndrome; metabolic disorder; immunomodulator;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      disorder;
                                                                                                                                                                                                                                                                                                                                                                                                                                       Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       New antisense compound targeted to a nucleic acid molecule encoding phosphoinositide 3-kinase, regulatory subunit 4, p150, useful for treating cancer, Chediak-Higashi syndrome or a metabolic disorder.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Phosphoinositide-3-kinase regulatory subunit 4 p150 fragment 124656.
                                                                                                                                                                                                                                                                                                                                                                                                                                     ,
0
                                                                                                                                                                                                                                                                                                                                                                                   0.4%; Score 20; DB 1; Length 20;
100.0%; Pred. No. 1.4e+02;
tive 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                               Sequence 20 BP; 2 A; 6 C; 4 G; 8 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Example 15; SEQ ID NO 138; 60pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     3899 TICTIGCCIAIGCCACIGIG 3918
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1 rrcirgccrargccaciere 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                18-SEP-2003; 2003US-00667022.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        cytostatic; gene therapy; ds.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      31-MAY-2002; 2002US-00160786
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ADL34692 standard; DNA; 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          17-JUN-2004 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                     Local Similarity 100.
nes 20; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Dobie KW;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       WPI; 2004-282523/26.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 (FREI/) FREIER S M.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        (DOBI/) DOBIE K W.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          US2004063657-A1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       01-APR-2004.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Freier SM,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ADL34692;
                                                                                                                                                                                                                                                                                                                                                                                                        Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 RESULT 302
                                                                                                                                                                                                                                                                                                                                                                                                                                                Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ADL34692
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                셤
```

```
888888888888888
                                                                                                                                                                                                                                                                                                       8
                                                                                                                                                                                                                                         용
                                                                                                                                                                                 ö
antisense oligonucleotide further comprises at least one modified nucleobase, preferably a 5-methylcytosine. The antisense oligonucleotide can be used in diagnostics and as research reagents and kits. It can also be used prophylactically, e.g. to prevent or delay infection, inflammation or tumour formation. It can also be used to treat a disease or condition associated with phosphoinositide-3-kinase, regulatory subunit 4, p150, e.g. hyperproliferative disorder, preferably cancer, chediak-Higashi syndrome or a metabolic disorder. The products of the invention are immunomodulators with cytostatic activity and can be used
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            This invention describes a novel antisense oligonucleotides which specifically hybridises to and inhibits the expression of human phosphoinositide-3-kinase, regulatory subunit 4, p150. The oligonucleotides comprises at least one modified internucleoside linkage, preferably a phosphorothioate linkage. It also comprises at least one
                                                                                                                                                                                                                                                                                                                                                                                     antisense; inhibitor; hybridisation; human; phosphoinositide-3-kinase; regulatory subunit 4; p150; internucleoside linkage; phosphorothioate linkage; 2'-O-methoxyethyl sugar; 5-methylcytosine; infection; inflammation; tumour formation; hyperproliferative disorder; cancer; Chediak-Higashi syndrome; metabolic disorder; immunomodulator; cytostatic; gene therapy; ss; primer.
                                                                                                                                                                                 Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       encoding
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      New antisense compound targeted to a nucleic acid molecule encodin
phosphoinositide-3-kinase, regulatory subunit 4, p150, useful for
treating cancer, Chediak-Higashi syndrome or a metabolic disorder.
                                                                                                                                                                                 ö
                                                                                                                                                      0.4%; Score 20; DB 1; Length 20;
100.0%; Pred. No. 1.4e+02;
ive 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              /note= "phosphorothioate backbone"
                                                                                                                                  Sequence 20 BP; 3 A; 4 C; 6 G; 7 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                 ISIS antisense oligonucleotide ISIS 206958.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Example 15; SEQ ID NO 12; 60pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Location/Qualifiers
                                                                                                                                                                                                      4050 CAGTGGTACCATGGCTTGTT 4069
                                                                                                                                                                                                                               1 cadredraccarderrerr 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   base= OTHER
                                                                                                                                                                                                                                                                                          ADL34566 standard; DNA; 20 BP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       18-SEP-2003; 2003US-00667022
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              31-MAY-2002; 2002US-00160786
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1. .20
/*tag= a
                                                                                                                                                                                                                                                                                                                                          (first entry)
                                                                                                                                                                                20; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Freier SM, Dobie KW;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       DOE!
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                WPI; 2004-282523/26.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     (FREI/) FREIER S M. (DOBI/) DOBIE K W.
                                                                                                                                                                   Local Similarity
                                                                                                           for gene therapy.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        US2004063657-A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Key
modified_base
                                                                                                                                                                                                                                                                                                                                          17-JUN-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               01-APR-2004.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Synthetic.
                                                                                                                                                                                                                                                                                                                  ADL34566;
                                                                                                                                                        Query Match
                                                                                                                                                                                                                                                                Matches
  셤
                                                                                                                                                                                                         ઠે
```

```
ö
modified sugar moiety, preferably a 2'-O-methoxyethyl sugar moiety. The antisense oligonucleotide further comprises at least one modified antisense oligonucleotide further comprises at least one modified can nucleobase, preferably a 5-methylcytosine. The antisense oligonucleotide can be used in diagnostics and as research reagents and kits. It can also be used prophylactically, e.g. to prevent or delay infection, inflammation or tumour formation. It can also be used to treat a disease or condition associated with phosphoinositide-3-kinase, regulatory cubunit 4, p150, e.g. hyperproliferative disorder, preferably cancer, Chediak-Higashi syndrome or a metabolic disorder. The products of the invention are immunomodulators with cytostatic activity and can be used
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                This invention describes a novel antisense oligonucleotides which specifically hybridises to and inhibits the expression of human phosphoinositide-3-kinase, regulatory subunit 4, p150. The oligonucleotides comprises at least one modified internucleoside linkage,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              antisense; inhibitor; hybridisation; human; phosphoinositide-3-kinase; regulatory subunit 4; p150; internucleoside linkage; phosphorothioare linkage; 2'-O-methoxyethyl sugar; 5-methylcytosine; infection; inflammation; tumour formation; hyperproliferative disorder; cancer; Chediak-Higashi syndrome; metabolic disorder; immunomodulator; cytostatic; gene therapy; ss; primer.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Gapa
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    New antisense compound targeted to a nucleic acid molecule encoding
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      phosphoinositide-3-kinase, regulatory subunit 4, p150, useful for
treating cancer, Chediak-Higashi syndrome or a metabolic disorder.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ..
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                0.4%; Score 20; DB 1; Length 20; 100.0%; Pred. No. 1.4e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   /note= "phosphorothioate backbone"
                                                                                                                                                                                                                                                                                                                                                                                                  Sequence 20 BP; 6 A; 4 C; 9 G; 1 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ISIS antisense oligonucleotide ISIS 207031.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Example 15; SEQ ID NO 77; 60pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      92 CGGTCTGCACTTCTCTCCCG 111
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    /mod_base= OTHER
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CGGTCTGCACTTCTCTCCCG 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        BP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      100.08;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      18-SEP-2003; 2003US-00667022.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       31-MAY-2002; 2002US-00160786.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ADL34631 standard; DNA; 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1. .20
/*tag= a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          17-JUN-2004 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Dobie KW;
                                                                                                                                                                                                                                                                                                                                                                                                                                 Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  WPI; 2004-282523/26.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     (FREI/) FREIER S M.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    (DOBI/) DOBIE K W.
                                                                                                                                                                                                                                                                                                                                        for gene therapy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        US2004063657-A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Key
modified_base
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     SM,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         01-APR-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Synthetic.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ADL34631;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Freier
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      RESULT 304
ADL34631/c
```

```
ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      This invention describes a novel antisense oligonuclectides which specifically hybridises to and inhibits the expression of human phosphoincatide-3-kinase, regulatory submit 4, p150. The oligonuclectides comprises at least one modified internucleoside linkage, preferably a phosphorothioate linkage. It also comprises at least one modified sugar moiety, preferably a 2'-0-methoxyethyl sugar moiety. The antisense oligonucleotide further comprises at least one modified angere oligonucleotide further comprises at least one modified nucleobase, preferably a 5-methylcytosine. The antisense oligonucleotide can be used in diagnostics and as research reagents and kits. It can also
preferably a phosphorothioate linkage. It also comprises at least one modified sugar moiety, preferably a 2'-O-methoxyethyl sugar moiety. The antisense oligonucleotide further comprises at least one modified nucleobase, preferably a 5-methylyctosine. The antisense oligonucleotide can be used prophylateically a 5-methylyctosine. The antisense oligonucleotide be used prophylateically, e.g. to prevent or delay infection, inflammation or tumour formation. It can also be used to treat a disease or condition associated with phosphoinositide 3-kinase, regulatory subbunit 4, p150, e.g. hyperproliferative disorder, preferably cancer, chediak-Higashi syndrome or a metabolic disorder. The products of the invention are immunomodulators with cytostatic activity and can be used
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   antisense; inhibitor; hybridisation; human; phosphoinositide-3-kinase; regulatory subunit 4; p150; internucleoside linkage; phosphorochioacte linkage; 2'-O-methoxyethyl sugar; 5-methylcytosine; infection; inflammation; tumour formation; hyperproliferative disorder; cancer; Chediak-Higashi syndrome; metabolic disorder; immunomodulator;
                                                                                                                                                                                                                                                                                                                                                       Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                New antisense compound targeted to a nucleic acid molecule encoding phosphoinositide-3-kinase, regulatory subunit 4, p150, useful for treating cancer, Chediak-Higashi syndrome or a metabolic disorder.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Phosphoinositide-3-kinase regulatory subunit 4 p150 fragment 124608.
                                                                                                                                                                                                                                                                                                                                                       ö
                                                                                                                                                                                                                                                                                                            0.4%; Score 20; DB 1; Length 20; 00.0%; Pred. No. 1.4e+02;
                                                                                                                                                                                                                                                                                                                                                  0; Indels
                                                                                                                                                                                                                                                                     Sequence 20 BP; 6 A; 2 C; 7 G; 5 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                           100.0%; Pred. No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Example 15; SEQ ID NO 101; 60pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                4258 CCACTTTCTGAATTACAGCC 4277
                                                                                                                                                                                                                                                                                                                                                                                                                         CCACTITCTGAATIACAGCC 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ADL34655 standard; DNA; 20 BP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 cytostatic; gene therapy; ds.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           18-SEP-2003; 2003US-00667022.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    31-MAY-2002; 2002US-00160786
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            (first entry)
                                                                                                                                                                                                                                                                                                                                                         20; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Freier SM, Dobie KW;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             WPI; 2004-282523/26.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        (FREI/) FREIER S M. (DOBI/) DOBIE K W.
                                                                                                                                                                                                                                                                                                                                 Similarity
                                                                                                                                                                                                                                   for gene therapy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              US2004063657-A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               17-JUN-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     01-APR-2004.
                                                                                                                                                                                                                                                                                                                                                                                                                                        20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ADL34655;
                                                                                                                                                                                                                                                                                                                  Query Match
Best Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         RESULT 305
                                                                                                                                                                                                                                                                                                                                                           Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ADL34655
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 g
          222222222222222
                                                                                                                                                                                                                                                                                                                                                                                                    8
```

```
This invention describes a novel antisense oligonuclectides which specifically hybridises to and inhibits the expression of human phosphoinostitée-3-kinase, regulatory submit 4, p150. The oligonuclectides comprises at least one modified internucleoside linkage, preferably a phosphorothioate linkage. It also comprises at least one modified sugar moiety, preferably a 2-0-methoxyethyl sugar moiety. The antisense oligonucleotide further comprises at least one modified antisense oligonucleotide further comprises at least one moiffied antisense oligonucleotide can be used in diagnostics and as research reagents and kits. It can also be used prophylactically, e.g. to prevent or delay infection, inflammation or tumour formation. It can also be used to treat a disease or condition associated with phosphoinositide-3-kinase, regulatory submint 4, p150, e.g. hyperproliferative disorder, preferably cancer, Chediak-Higashi syndrome or a metabolic disorder. The products of the
                                                                                                                                                                                                                                          ö
              inflammation or tumour formation. It can also be used to treat a disease or condition associated with phosphoinositide-3-kinase, regulatory subunit 4, p150, e.g. hyperproliferative disorder, preferably cancer, chediak-Higashi syndrome or a metabolic disorder. The products of the invention are immunomodulators with cytostatic activity and can be used
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    antisense; inhibitor; hybridisation; human; phosphoinositide-3-kinase; regulatory subunit 4; p150; internucleoside linkage; phosphorothioace linkage; 2'-0-methoxysthyl sugar; 5-methylcytosine; infection; inflammation; tumour formation; hyperproliferative disorder; cancer; Chediak-Higashi syndrome; metabolic disorder; immunomodulator;
                                                                                                                                                                                                                                          Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Phosphoinositide-3-kinase regulatory subunit 4 p150 fragment 124618.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               New antisense compound targeted to a nucleic acid molecule encoding phosphoinositide-3-kinase, regulatory subunit 4, p150, useful for treating cancer, Chediak-Higashi syndrome or a metabolic disorder.
                                                                                                                                                                                                                                          ö
be used prophylactically, e.g. to prevent or delay infection,
                                                                                                                                                                                                    0.4%; Score 20; DB 1; Length 20;
100.0%; Pred. No. 1.4e+02;
                                                                                                                                                                                                                                          Indels
                                                                                                                                                             Sequence 20 BP; 5 A; 4 C; 6 G; 5 T; 0 U; 0 Other;
                                                                                                                                                                                                              100.0%; Pred. No. -
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Example 15; SEQ ID NO 107; 60pp; English.
                                                                                                                                                                                                                                                                                    998 ITCGICATGGGGACATCAAG 1017
                                                                                                                                                                                                                                                                                                                           rrcercareeesacarcaas 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              18-SEP-2003; 2003US-00667022
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   31-MAY-2002; 2002US-00160786
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   cytostatic; gene therapy; ds
                                                                                                                                                                                                                                                                                                                                                                                                                               ADL34661 standard; DNA; 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              17-JUN-2004 (first entry)
                                                                                                                                                                                                                                              Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Dobie KW;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               WPI; 2004-282523/26.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           (FREI/) FREIER S M. (DOBI/) DOBIE K W.
                                                                                                                                                                                                        Query Match
Best Local Similarity
Matches 20; Conserv
                                                                                                                         for gene therapy.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  US2004063657-A1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      01-APR-2004.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Freier SM,
                                                                                                                                                                                                                                                                                                                             Н
                                                                                                                                                                                                                                                                                                                                                                                                                                 888888888888
                                                                                                                                                                                                                                                                                         ð
                                                                                                                                                                                                                                                                                                                           셤
```

gibbs-10-667-022-4.rng

ö

Length 20;

```
This invention describes a novel antisense oligonucleotides which specifically hybridises to and inhibits the expression of human phosphornositide. Stranse, regulatory subunit 4, piso. The oligonucleotides comprises at least one modified internucleoside linkage, preferably a phosphorothioate linkage. It also comprises at least one modified sugar molety, preferably a 2'-O-methoxyethyl sugar molety. The antisense oligonucleotide further comprises at least one modified nucleobase, preferably a 5-methylcytosine. The antisense oligonucleotide further comprises at least one modified nucleobase, preferably a 5-methylcytosine. The antisense oligonucleotide can be used in diagnostics and as research reagents and kits. It can also be used prophylactically, e.g. to prevent or delay infection, inflammation or tumour formation. It can also be used to treat a disease or condition associated with phosphoinositide-3-kinase, regulatory combunit 4, plso, e.g. hyperproliferative disorder, preferably cancer, chediak-Higashi syndrome or a metabolic disorder. The products of the invention are immunomodulators with cytostatic activity and can be used
invention are immunomodulators with cytostatic activity and can be used
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      regulatory subunit 4; piSO; internucleoside linkage;
phosphorothioare linkage; 2'-O-methoxyethyl sugar; S-methylcytosine;
infection; inflammation; tumour formation; hyperproliferative disorder;
cancer; Chediak-Higashi syndrome; metabolic disorder; immunomodulator;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     antisense; inhibitor; hybridisation; human; phosphoinositide-3-kinase;
                                                                                                                                              Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                            Phosphoinositide-3-kinase regulatory subunit 4 p150 fragment 124624.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    New antisense compound targeted to a nucleic acid molecule encoding phosphoinositide-3-kinase, regulatory subunit 4, p150, useful for treating cancer, Chediak-Higashi syndrome or a metabolic disorder.
                                                                                                                                                ö
                                                                                                 0.4%; Score 20; DB 1; Length 20;
100.0%; Pred. No. 1.4e+02;
tive 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Sequence 20 BP; 6 A; 5 C; 4 G; 5 T; 0 U; 0 Other;
                                                              Sequence 20 BP; 3 A; 7 C; 5 G; 5 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Example 15; SEQ ID NO 111; 60pp; English.
                                                                                                                                                                                     1498 CAGCGTGGCAATGCCTTTCC 1517
                                                                                                                                                                                                          CAGCGTGGCAATGCCTTTCC 20
                                                                                                                                                                                                                                                                                                                                 ADL34665 standard; DNA; 20 BP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        cytostatic, gene therapy, ds.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          18-SEP-2003; 2003US-00667022.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   31-MAY-2002; 2002US-00160786.
                                                                                                                                                                                                                                                                                                                                                                                                                 (first entry)
                                                                                                                                            20; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Freier SM, Dobie KW;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 WPI; 2004-282523/26.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       (FREI/) FREIER S M. (DOBI/) DOBIE K W.
                                                                                                   Query Match
Best Local Similarity
Matches 20; Conserv
                     for gene therapy.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   therapy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          US2004063657-A1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                   17-JUN-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 01-APR-2004.
                                                                                                                                                                                                                                                                                                                                                                        ADL34665;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   for gene
                                                                                                                                                                                                                                                                                          307
ន្តដូន
                                                                                                                                                                                                                         g
                                                                                                                                                                                                                                                                                                                                 ò
```

```
This invention describes a novel antisense oligonucleotides which specifically hybridises to and inhibits the expression of human phosphoinositide-1*timase, regulatory subunit 4, p150. The phosphoinositide-1*chase, regulatory subunit 4, p150. The oligonucleotides comprises at least one modified internucleoside linkage, preferably a phosphorothioate linkage. It also comprises at least one modified modified modety, preferably a 2'-O-methoxyethyl sugar modety. The antisense oligonucleotide further comprises at least one modified nucleobase, preferably a 5-methylcytosine. The antisense oligonucleotide can be used in diagnostics and as research reagents and kits. It can also be used prophylactically, e.g. to prevent or delay infection, inflammation or tumour formation. It can also be used to treat a disease or condition associated with phosphoinositide-3-kinase, regulatory subunit 4, p150, e.g. hyperproliferative disorder, preferably cancer, chediak-Higashi syndrome or a metabolic disorder. The products of the invention are immunomodulators with cytostatic activity and can be used
                                         ö
                                                                                                                                                                                                                                                                                                                                                                                                                                          disorder;
                                                                                                                                                                                                                                                                                                                                                                           antisense; inhibitor; hybridisation; human; phosphoinositide-3-kinase; regulatory subunit 4; p150; internucleoside linkage; phosphorothioate linkage; 2'-O-methoxyethyl sugar; 5-methylcytosine; infection; inflammation; tumour formation; hyperproliferative disorder cancer; Chediak-Higashi syndrome; metabolic disorder; immunomodulator;
                                           Gapa
                                                                                                                                                                                                                                                                                                                                        Phosphoinositide-3-kinase regulatory subunit 4 p150 fragment 124643.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             encoding
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           New antisense compound targeted to a nucleic acid molecule encodir
phosphoinositide-3-kinase, regulatory subunit 4, p150, useful for
treating cancer, Chediak-Higashi syndrome or a metabolic disorder.
                                           ö
                                           Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Sequence 20 BP; 9 A; 5 C; 2 G; 4 T; 0 U; 0 Other;
0.4%; Score 20; DB 1; Le
100.0%; Pred. No. 1.4e+02;
ive 0; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Example 15; SEQ ID NO 129; 60pp; English.
                                                                                  1978 GCCCAAGATGATGCTACTAT 1997
                                                                                                          1 GCCCAAGATGATGCTACTAT 20
                                                                                                                                                                                                                       ВЪ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         18-SEP-2003; 2003US-00667022.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               cytostatic; gene therapy; ds
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              31-MAY-2002; 2002US-00160786
                                                                                                                                                                                                                       ADL34683 standard; DNA; 20
                                                                                                                                                                                                                                                                                                   (first entry)
                                             Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Dobie KW;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      WPI; 2004-282523/26.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   (FREI/) FREIER S M. (DOBI/) DOBIE K W.
    Query Match
Best Local Similarity
Matches 20; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   for gene therapy.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           US2004063657-A1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Homo sapiens.
                                                                                                                                                                                                                                                                                                   17-JUN-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                01-APR-2004.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Freier SM,
                                                                                                                                                                                                                                                            ADL34683;
                                                                                                                                                                                RESULT 308
                                                                                                                                                                                                     ADL34683
                                                                                                                    g
                                                                                                                                                                                                                       Š
```

ö

Gape

ö

0; Indels

0.4%; Score 20; DB 1; Le 100.0%; Pred. No. 1.4e+02; ive 0; Mismatches 0;

Query Match Best Local Similarity 100.0 Matches 20, Conservative

3388 AAAACTGAACTTCAGCAACT 3407

8

Length 20;

Mycrene synthase; limonene synthase; pinene synthase; flavour; monoterpene synthase; aroma; defense; plant seed; oll; meal; primer; PCR;

Primer used for subcloning limonene synthase sequences.

(first entry)

27-SEP-1999

AAX08666;

AAX08666 standard; DNA; 21 BP.

셤

AAAACTGAACTTCAGCAACT 20

```
The invention relates to a novel method for isolating molecules using a micro-channel. The molecules are isolated by introducing a mixed solution confirm molecules and set isolated by introducing a mixed solution confirm molecules differing in molecular weight into a micro flow path, to form a non turbulent flow, and providing physical action to the molecules by changing the flow state, thus causing confirmed behaviours among different solute molecules, where the different behaviour smables uneven distribution of specific kinds of molecules in the flow path, causing separation of the molecules. The converted with a micro flow path, having one or more curved portions, a substrate with a micro flow path, having one or more curved portions, a substrate with a micro flow path, having one or more curved portions, a substrate with a micro flow path, having one or more curved portions of side, and a physical property detection sensor arranged inside the curved portion or outside the curved portion. The method inside the curved conformation of side, and a fifticiant separation of molecules by utilising specific flow behaviour in a non turbulent flow, in a micro flow path, where a large number of samples can be processed. This polymucleotide sequence in minder of samples can be processed. This polymucleotide sequence
                                                                                                                                                                                                    molecule isolation; micro-channel; molecular weight; micro flow path; polymer compound; flow behaviour; non turbulent flow; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Isolating molecules e.g., DNA, by introducing solution with two traces molecules into micro flow path to form non turbulent flow, providing physical action to molecule causing difference in flow
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       in the exemplification of the invention.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Maeda H, Shimizu H, Miyazaki M, Nakamura H;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Length 20;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          0.4%; Score 20; DB 1; Length 20;
100.0%; Pred. No. 1.4e+02;
iive 0; Mismatches 0; Indels
                                                                                                                                                           Micro-channel molecule isolation related Adenine oligo.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Sequence 20 BP; 20 A; 0 C; 0 G; 0 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    (NAAD-) NAT INST ADVANCED IND SCI & TECHNOLOGY.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Example 3; Page 7; 19pp; Japanese.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          behavior, separating molecules.
                                                                                                                                                                                                                                                                                                                                                                                                     18-FEB-2004; 2004WO-JP001814.
                                                                                                                                                                                                                                                                                                                                                                                                                                                18-FEB-2003; 2003JP-00039870
                                      ADR69805 standard; DNA; 20
                                                                                                                         (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             represents an oligo used
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   WPI; 2004-661906/64.
                                                                                                                                                                                                                                                                                                                       WO2004076038-A1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Yamashita K,
Yamaguchi Y;
                                                                                                                                                                                                                                                                              Unidentified
                                                                                                                         02-DEC-2004
                                                                                                                                                                                                                                                                                                                                                                 10-SEP-2004.
                                                                                   ADR69805;
RESULT 309
                      ADR69805
```

types of

New isolated gymnosperm monoterpene synthase DNA - obtained from Grand fir (Abies grandis), used to provide plants with modified production of monoterpenes, e.g. mycrene, limonene or pinene.

Example 3; Page 110; 121pp; English.

(UNIW ) UNIV WASHINGTON STATE RES FOUND.

98WO-US014528 97US-0052249P

10-JUL-1998; 11-JUL-1997;

WO9902030-A1.

Synthetic.

21-JAN-1999

Croteau RB;

Bohlmann J, Steele CL, WPI; 1999-120396/10.

```
Nucleotide sequences encoding mycrene synthase, limonene synthase and pinear synthase from Grand fir may be incorporated into any organism pinear pinear plant, animal, microbe), or derived cell culture that pinear plant, animal, microbe), or derived cell culture that consumes any theory of the production of the aforementioned produces geranyl diphosphate for the production of the aforementioned carginary also be used for the production or modification of flavour and cargina properties, improvement of defense capability, and the alteration of their ecological interactions mediated by mycrene, limonene, pinene, or their derivatives. In particular they can be used for the production or of plant seeds for the extraction of oil or meal. Onlys encoding myrcene of plant seeds for the extraction of oil or meal. Onlys encoding myrcene synthase primers for the extraction of four degenerate primers (AxX08646 or ever identified for construction of four degenerate primers (AxX08646 or ever identified for construction of four degenerate primers (AxX08646 or ever identified for construction of four degenerate primers (AxX08646 or ever identified for construction of four degenerate primers (AxX08649 and AXX0864) and an antisense primer and used for CRAV08648 and AXX08649 generated a PCR product which was 110 base pairs in the amplified product was used in a plasmid construct to cranscruct account of the capability of product was used in a plasmid construct to synthase sequence given in AxX08643. The other clones is the myrcene of escribed in AxX0864-5.53) were identified for construction of three degenerated a pCR product was used in a plasmid construct to cranscrated a PCR product was used in a plasmid construct to conserved sequences were identified for construction of these clones is the conserved sequence was identical in all transformately 1020 base pairs in construct by the primers described in AxX08643. The other 
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Sequence 21 BP; 5 A; 6 C; 7 G; 3 T; 0 U; 0 Other;
```

0.4%; Score 20; DB 1; Length 21;

Query Match

ö

Gaps

ö

5025 AAAAAAAAAAAAAAAA 5044

ò a

20; Conservative

Query Match Best Local Similarity Matches 20; Conser

RESULT 310 AAX08666

```
(HOOP/) HOOPER J W.
(SCHM/) SCHMALJOHN C S.
                                                                             Eremothecium gossypii
                                                                                                                                                                                                                                                                                                                                                            WPI; 2003-524771/50.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               US2004053216-A1.
                                                                                                                                                                                                                                                                              (BADI ) BASF AG
                                                                                                                 DE10159396-A1
                                                                                                                                                                                                                                                                                                                        Althoefer H,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Unidentified
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       03-JUN-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       18-MAR-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  24
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ADK15557;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Best Loca
Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             RESULT 313
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ADK15557
                  원
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ઠે
                                     ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         The present invention provides the protein and coding sequences of monoterpene synthases from the grand fir. These include (-)-camphene synthase, (-)-beta-phellandrene synthase, terpinolene synthase, (-)-limonene/(-)-alpha-pinene synthase, limonene synthase, myrcene synthase and pinene synthase. The sequences can be used to produce transgenic plants expressing high levels of the enzymes, resulting in levels which are useful in protecting against and treating cancers, and to confer insect resistance on plants
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     New nucleic acid encoding monoterpene synthases, for increasing terpene synthesis in plants, e.g. for increasing resistance to pests or for treatment of cancer.
                                     Gарв
                                                                                                                                                                                                                                                                                                                                                                             Monoterpene synthase; grand fir; cancer; (-)-camphene synthase; myrcene synthase; (-)-limonene synthase; (-)-pinene synthase; probe; terpinolene synthase; insect resistance; nutrition; PCR primer; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Gaps
                                                                                                                                                                                                                                                                                                                                         Grand fir monoterpene synthase PCR primer 3-18-EcoRI SEQ ID NO: 35
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ö
                                     ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   0.4%; Score 20; DB 1; Length 21;
100.0%; Pred. No. 1.5e+02;
ive 0; Mismatches 0; Indels
                                     0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       A gossypii riboflavin synthesis gene rib7 PCR primer #1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Sequence 21 BP; 5 A; 6 C; 7 G; 3 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Steele CL, Bohlmann J, Croteu RB, Phillips MA;
                Pred. No. 1.5e+02;
                                     Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    (UNIW ) UNIV WASHINGTON STATE RES FOUND.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Example 3; Page 140; 175pp; English.
100.0%; Pre-
                                                                           32
                                                                                                           1 CTGCAGGAATTCGGCACGAG 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       13 CTGCAGGAATTCGGCACGAG 32
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CTGCAGGAATTCGGCACGAG 20
                                                                         13 CTGCAGGAATTCGGCACGAG
                                                                                                                                                                                                                    ВР
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ВР
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    24-JUL-2000; 2000WO-US020264.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            99US-00360545
                                                                                                                                                                                                                    AAF73394 standard; DNA; 21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ADK65560 standard; DNA; 24
                                                                                                                                                                                                                                                                                                   (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               20; Conservative
                                     20; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                WPI; 2001-182782/18.
              Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    WO200107565-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                               Ables grandis
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            26-JUL-1999;
                                                                                                                                                                                                                                                                                                 30-APR-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               06-MAY-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              01-FEB-2001
                                                                                                                                                                                                                                                         AAF73394;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ADK65560
                Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      RESULT 312
ADK65560/C
XX
AC ADK655/
XX
XX
XX
DG -MAY
XX
DE A GOSB)
                                                                                                                                                                            RESULT 311
              Best Loc
Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Matches
                                                                                                                                                                                            AAP73394

XX AAC73394

XX AAC73394

XX AAC7330-1

XX AAC730-1

XX
                                                                                                        8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         g
                                                                           ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ઠે
```

```
ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          The present invention relates to a method of microbial production of riboflavin using a riboflavin-producing microorganism of the genus Ashbya in which at least two of the products of the genes rib1, rib2, rib4 and rib7 have greater activity than in the wild type organism ATC 10895. Riboflavin (vitamin B2) is an additive for human foods and animal fodder. The present sequence is a PCR primer used to isolate the Ashbya gossypii rib7 gene which was used in the method of the invention.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        virucide; gene therapy; hantavirus; M segment; L segment; S segment; hantavirus; hantavirus; hantavirus; hantavirus; hantaan virus; HNTV; DNA vaccine; HNTV M genomic segment; pWRG/HTN-M9(x);
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Microbial production of riboflavin (vitamin B2), useful as additive for human food or animal fodder, comprises growth of microbes in which activity of rib gene products is increased.
ribl; rib2; rib4; r1b7; riboflavin; food; animal feed; 88; primer; PCR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Gape
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Hantaan hantavirus M segment derived DNA vaccine related DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            'Match 0.4%; Score 20; DB 1; Length 24; Local Similarity 100.0%; Pred. No. 1.5e+02; les 20; Conservative 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Sequence 24 BP; 3 A; 11 C; 7 G; 3 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             5066 TCGAGGGGGCCCGGTACC 5085
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Example 1; Page 7; 22pp; German.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TCGAGGGGGCCCGGTACC 5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ADK15557 standard; DNA; 24 BP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            29-AUG-2001; 2001US-00941974.
22-MAR-2002; 2002US-0367128P.
26-JUL-2002; 2002US-0398985P.
                                                                                                                                                                                                                                                                                                                        04-DEC-2001; 2001DE-01059396
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                21-MAR-2003; 2003US-00394388
                                                                                                                                                                                                                                                                                                                                                                                                         04-DEC-2001; 2001DE-01059396
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Revuelta DJL;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                (first entry)
```

```
Matches
                                                                                                                                                                                                                                                                                                                                                                                                              g
8
                                                                                                                                         The invention describes a nucleic acid (1), or its fragment, comprising a fully defined sequence of 24 base pairs, as given in the specification. Also described are: a recombinant DNA construct comprising a vector, at least one hantavirus M gene nucleic acid fragment and the nucleic acid fragment (1); a composition (II) comprising inert particles and a nucleic acid coated onto the inert particles producing nucleic acid coated onto the inert particles producing nucleic acid coated onto the next particles producing nucleic acid coated onto in a hantavirus polynucleotide M segment encoding G1 and G2 from one or more hantavirus polynucleotide M segment encoding G1 and G2 from one or more hantavirus infection, comprising the composition (II) and a pharmaceutical excipient; inducing a protective immune response against hantavirus infection in a mammal; a vaccine against infection with the hantavirus infection in a mammal; a vaccine against infection with the detecting hantavirus infection; and a hantavirus infection with the composition (II); treating the composition (II); reating the detecting the composition (II) and ancillary reagents for detecting the
                                                                                                                                                                                                                                                                                                                                                                                                                                                    ö
                                                                                                                                                                                                                                                                                                                           presence or absence of hantavirus antigens in a sample. The composition and methods are useful for diagnosing, preventing and treating hantavirus infection. This sequence represents an exogenous DNA associated with the Hantaan hantavirus DNA vaccine comprising the HNTV M (medium) genomic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    MHC; major histocompatability complex; class II; control oligomers; DR A; transplantation; antigen; autoimmune disease; ss.
                                                                                  preventing and treating hantavirus (e.g. hemorrhagic fever with renal syndrome and/or hantavirus pulmonary syndrome hantavirus) infection.
                                                                                                                                                                                                                                                                                                                                                                                                                                                    Gaps
                                                                      nucleic acid molecules and polypeptides useful for diagnosing,
                                                                                                                                                                                                                                                                                                                                                                                                                                                    ö
                                                                                                                                                                                                                                                                                                                                                                                                                           Score 20; DB 1; Length 24; Pred. No. 1.5e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                  0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                      Sequence 24 BP; 6 A; 5 C; 9 G; 4 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    s,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Tam
                                                                                                                                                                                                                                                                                                                                                                                                                     0.4%; Scor.
100.0%; Pred. No. ...
0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Huey B,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                MHC DR A intron binding oligomer Tcon.
                          Custer M;
                                                                                                                         Claim 13; SEQ ID NO 6; 96pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            13 CTGCAGGAATTCGGCACGAG 32
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Garovoy MR, Hunt A,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          92US-00830427.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    93WO-US000797
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AAQ47178 standard; DNA; 26
                          S)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                       20; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              (REGC ) UNIV CALIFORNIA.
                          Hooper JW, Schmaljohn
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                (revised)
                                                 WPI; 2004-247721/23
                                                                                                                                                                                                                                                                                                                                                                                                                                           Similarity
  (CUST/) CUSTER M.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   29-JAN-1993;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       WO9314769-A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           31-JAN-1992;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       14-SEP-1992;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               25-MAR-2003
25-JAN-1994
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             05-AUG-1993
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Synthetic.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Weiss TL,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AAQ47178;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ស
                                                                                                                                                                                                                                                                                                                                                                                                                                Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                            Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           RESULT 314
                                                                                                                                                                                                                                                                                                                                                                                                                                                       Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AAQ47178,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     g
```

```
ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         The present invention provides the protein and coding sequences of human tumour necrosis factor (TMF) receptor-associated factor 16. The sequences can be used in the treatment of lymphadenoma, cancer, dysgenopathy, phlogosis, immune diseases, haemopathy and HIV infection. The present
                                                                                                                                                                                                                                             The sequences given in AAQ47176-77 represent triplex forming oligonucleotides which bind to the mRNA sequence of the MHC class II locus DR A structural gene at positions 851-876. The sequences given in AAQ47178-80 represent control oligomers which contain base compositions similar to that around this DR A region but not containing the correct sequences. DR A is a transplantation antigen. Binding of this sequence to the DR A gene inhibits antigen production. This method may be used for treating individuals with autoimmune disease, characterised by dysfunctional expression of a transplantation antigen. It may also be used to produce cells which are more easily transplanted into a recipient. (Updated on 25-MAR-2003 to correct PN field.)
                                                       - using anti-sense
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Human tumor necrosis factor receptor-associated factor 16 and encoded polynuclectide, applicable in diagnosis and treatment of e.g. cancer, hemopathy, HIV infection, immunological diseases and various inflammations.
                                                    Depletion of transplantation antigens in donor cells - using anti-ser or triplex-forming oligonuclectide(s), used for treating auto-immune disease and in transplants.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Human; TNF receptor-associated factor 16; lymphadenoma; cancer; dysgenopathy; phlogosis; immune disease; haemopathy; HIV infection; tumour necrosis factor; cytostatic; virucide; immunomodulator; antlinflammatory; haemostatic; gene therapy; PCR primer; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               .;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Human TNF receptor-associated factor 16 cDNA PCR primer #1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Score 19,6; DB 1; Length 26; Pred. No. 1.7e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            4; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Sequence 26 BP; 0 A; 0 C; 4 G; 22 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 5025 AAAAAAAAAAAAAAAAAAAAAA 5050
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    (SHAN-) SHANGHAI BIOWINDOW GENE DEV INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                26 AAAAAAAAAAAAAAAAAAAAAAAA 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Example 3; Page 17; 37pp; Chinese.
                                                                                                                                                                                               Example; Page 22; 71pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                26-MAR-2001; 2001WO-CN000432
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         27-MAR-2000; 2000CN-00115167
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    0.4%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               .951/c
ABA01951 standard; DNA; 24
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            06-FEB-2002 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     WPI; 2002-034341/04.
WPI; 1993-258367/32.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      WO200179279-A1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Mao Y, Xie Y;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Mac
Local Sim
22;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           25-OCT-2001.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ABA01951;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            RESULT 315
ABA01951/c
```

gibbs-10-667-022-4.rng

```
Synthetic.
                                                                                                              ABS77576;
                                                              RESULT 317
                                                                                       셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          8
  ò
                                                                          ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          The present invention relates to a method for stimulating an immune response. The method comprises administering an immunostimulatory nucleic acid to a non-rodent subject in sufficient quantity to stimulate an immune response. The present sequence is one such immunostimulatory nucleic acid. The immunostimulatory nucleic acids and be pyrimidine rich (py-rich) or thymidine (T) rich. The method is used to vaccinate subjects against tumour antigens, viral antigens (e.g. herpesviridae, retroviridae and/or orthomyxoviridae), bacterial antigens (e.g. toxoplasma, haemophilus, campylobacter, clostridium, Escherichia coli and/or staphylococcus), fungal antigens and/or parasitic antigens. The method is also useful for preventing cancer, asthaw, infectious disease, allergy or immune deficiency. The present sequence can also be used to redirect a Th2 to a Th1 immune response and to activate immune cells. Note: the
                                                                                                                                                                                                                                                                                        Vaccine, cytostatic, virucidal, bactericidal, fungicidal, anti-parasitic, immunostimulatory, tumouur, viral infection, bacterial infection; fungal infection, cancer, asthma, infection, and the disease, allergy, immune deficiency, phosphorothioate, ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Vaccinating against tumors, infectious diseases, allergies and asthma using immunostimulatory Py-rich and TG nucleic acids.
                                                                          Gaps
 sequence is a PCR primer for the coding sequence of the invention
                                                                          ô
                                               0.4%; Score 19.4; DB 1; Length 24; 95.2%; Pred. No. 1.7e+02; tive 0; Mismatches 1; Indel8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              present sequence may have a phosphorothicate backbone
                        Sequence 24 BP; 3 A; 11 C; 7 G; 3 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Sequence 24 BP; 0 A; 0 C; 3 G; 21 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Disclosure, Page 39; 338pp; English.
                                                                                                  5063 AACTCGAGGGGGGCCCGGTA 5083
                                                                                                                                                                                                                                                                  Immunostimulatory nucleic acid #51.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Krieg AM, Schetter C, Vollmer J;
                                                                                                                         21 Accreaacecececeara 1
                                                                                                                                                                                      AAF98935 standard; DNA; 24 BP
                                                                                                                                                                                                                                                                                                                                                                                                                                                     25-SEP-1999; 99US-0156113P.
27-SEP-1999; 99US-0156135P.
23-AUG-2000; 2000US-0227436P.
                                                                                                                                                                                                                                                                                                                                                                                                                                25-SEP-2000; 2000WO-US026383
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        (IOWA ) UNIV IOWA RES FOUND. (COLE-) COLEY PHARM GMBH.
                                                                                                                                                                                                                                        12-JUN-2001 (first entry)
                                       Query Match
Best Local Similarity 95.2'
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       WPI; 2001-273485/28
                                                                                                                                                                                                                                                                                                                                                                               WO200122972-A2.
                                                                                                                                                                                                                                                                                                                                                                                                         05-APR-2001.
                                                                                                                                                                                                                                                                                                                                                        Synthetic.
                                                                                                                                                                                                                AAF98935;
                                                                                                                                                               RESULT 316
                                                                                                                                                                         SXS
                                                                                                   ઠે
                                                                                                                        유
```

```
administering at least one antianglogenic nucleic acid molecule. Also included is a kit comprising a first container housing the antianglogenic nucleic acids, and instructions for administering them to a subject having a condition characterised by unwanted anglogenesis. The method is useful for inhibiting anglogenesis associated with solid tumour growth, tumour metastasis, precancerous lesion, rheumatoid arthritis, psoriasis, diabetic retinopathy, retinopathy of prematurity, macular degeneration, corneal graft rejection, neovascular glaucoma, retrolental fibroplasia, rubeosis, Osler-Webber Syndrome, myocardial anglogenesis, plaque neovascularisation, telangiectasia, haemophiliac joints, anglofibroma, wound granulation, intestinal adhesions, atherosclerosis, scleroderma and hypertrophic scars. The present sequence is an antianglogenic nucleic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Inhibiting angiogenesis in a subject, involves administering at least one antiangiogenic nucleic acid molecule to the subject.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            The invention relates to inhibiting angiogenesis in a subject, comprising
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Anglogenesis inhibitor; ss; anglogenesis; solid tumour growth; tumour metastasis; precancerous lesion; rheumatoid arthritis; psoriasis; diabetic retinopathy; retinopathy of prematurity; macular degeneration; corneal graft rejection; neovascular glaucoms; retrolental fibroplasis; rubeosis; Osler-Webber Syndrome; myocardial anglogenesis; plaque neovascularisation; telangiectasia; haemophiliac joint; plaque manglofibroma; wund granulation; intestinal adhesion; atherosclerosis;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Gapa
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            0.4%; Score 19.2; DB 1; Length 24; 87.5%; Pred. No. 1.88+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Sequence 24 BP; 0 A; 0 C; 3 G; 21 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Angiogenesis inhibitory oligonucleotide #60.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    0; Mismatches
5025 AAAAAAAAAAAAAAAAAAAAA 5048
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               5025 AAAAAAAAAAAAAAAAAAA 5048
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AAAAACAAAAAAAAAAAAAAAAA 1
                                             AAAAACAAAAAAACAAAAAAACAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Claim 2; Page 20; 276pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         scleroderma; hypertrophic scar.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  14-DEC-2001; 2001WO-US048458.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             (COLE-) COLEY PHARM GROUP INC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  14-DEC-2000; 2000US-025534P.
                                                                                                                                                                                                                                                                           ABS77576 standard; DNA; 24
                                                                                                                                                                                                                                                                                                                                                                                                                                              (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Query Match
Best Local Similarity 87.5;
Matches 21; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          acid of the invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        WPI; 2002-566690/60.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        WO200253141-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Bratzler RL;
                                                                                                                                                                                                                                                                                                                                                                                                                                          13-DEC-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   11-JUL-2002
```

ö

RESULT 318 ACD99368/c

ö

Gaps

ö

Query Match 0.4%; Score 19.2; DB 1; Length 24; Best Local Similarity 87.5%; Pred. No. 1.8e+02; Matches 21; Conservative 0; Mismatches 3; Indels

```
New immunostimulatory oligonucleotide comprising non-palindromic nucleic acid sequence motif, useful for inducing B-cell activation, treating, preventing or ameliorating immune system disorder or tumoral disease e.g. melanoma.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  The invention relates to a method of treating or preventing allergy or asthma which comprises administering to a subject a poly-G nucleic acid in an aerosol formulation. The methods and compositions of the present invention are useful for diagnosing and/or treating asthma and allergy especially in a hypo-responsive subject. The present sequence represents an immunostimulatory nucleic acid of the invention.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ss; non-CpG; immunostimulatory; non-palindromic; immune response; proliferation; differentiation; cytokine; antibody production; B-cell; plasmacytoid dendritic cell; immunomodulator; gene therapy; chronic myelogenous leukaemia; melanoma; Kaposi's sarcoma; renal cell carcinoma.
                                                                                                                                                                                                                                                                                                                                                                                           Treating and/or preventing allergy or asthma using an immunostimulatory nucleic acid alone or in combination with an asthma/allergy medicament.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Similarity 87.5%; Pred. No. 1.8e+02;
11, Conservative 0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Sequence 24 BP; 0 A; 0 C; 3 G; 21 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             5025 AAAAAAAAAAAAAAAAAAAA 5048
                                                                                                                                                                                                                                                                                      Fouron Y;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ааааасааааааасааааааасаа 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Disclosure; Page 6; 221pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Non-CpG DNA oligonucleotide 2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          BP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          30-MAY-2003; 2003WO-EP005691.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 30-MAY-2002; 2002CA-02388049.
                                                       02-FEB-2001; 2001US-00776479.
                                                                                                              03-FEB-2000; 2000US-0179991P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        001/c
ADG76001 standard; DNA; 24
                                                                                                                                                                                                                                                                                      Bratzler RL, Petersen DM,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        11-MAR-2004 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              SA
                                                                                                                                                                  (BETE/) BRATZLER R L.
(PETE/) PETERSEN D M.
(FOUR/) FOURON Y.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                WPI; 2004-053333/05.
                                                                                                                                                                                                                                                                                                                                                WPI; 2003-657977/62.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           (IMMU-) IMMUNOTECH
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            WO2003101375-A2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Local Sim
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         11-DEC-2003.
08-MAY-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Synthetic.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ADG76001;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Lopez RA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             24
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Best Loca
Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   RESULT 320
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                HALL TAY TO THE TOTAL TO THE TOTAL TO THE TAY TO THE TA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             음
         ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       The invention describes a method of treating non-allergic inflammatory disease comprising administering to a subject having or at risk of developing a non-allergic inflammatory disease an immunostimulatory nucleic acid for prevention or treatment of the disease. The method is useful for treating non-allergic inflammatory diseases, such as psoriasis, eczema, allergic contect dermatitis, latex dermatitis or inflammatory bowel disease e.g., ulcerative colitis or Crohn's disease. This sequence represents an immunostimulatory nucleic acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Gaps
                                                                                                                                                                                                                                        Immunostimulatory; antiinflammatory; dermatological; antipsoriatic; antiulcer; gene therapy; vaccine; non-allergic inflammatory disease; psoriasis; eczema; allergic contact dermatitis; latex dermatitis; inflammatory bowel disease; ulcerative colltis; Crohn's disease; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Treating non-allergic inflammatory diseases, such as psoriasis, ecz allergic contact dermatitis, latex dermatitis or inflammatory bowel disease by administering an immunostimulatory nucleic acid.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                .
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ds; allergy; asthma; poly-G nucleic acid; aerosol formulation; hypo-responsive subject; immunostimulatory.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                V Match
Local Similarity 87.5%; Pred. No. 1.8e+02;
les 21; Conservative 0; Mismatches 3. Tran-
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Sequence 24 BP; 0 A; 0 C; 3 G; 21 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Disclosure; Page 10; 229pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Immunostimulatory nucleic acid #51.
                                                                                                                                                                                          Immunostimulatory nucleic acid #54.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       BP
                  BP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         29-MAR-2002; 2002US-00112653.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    29-MAR-2001; 2001US-0279642P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ADB36437 standard; DNA; 24
                     ACD99368 standard; DNA; 24
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           (first entry)
                                                                                                                                   (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          WPI; 2003-521815/49.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Berg DJ;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           (KRIE/) KRIEG A M.
(BERG/) BERG D J.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      US2003087848-A1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                           US2003050268-A1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        04-DEC-2003
                                                                                                                                      25-SEP-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  13-MAR-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Synthetic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Krieg AM,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ADB36437;
                                                                                                                                                                                                                                                                                                                                                                                                       Synthetic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       24
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Query Match
                                                                               ACD99368
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   RESULT 319
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ADB36437
```

ઠે 셤

```
This invention relates to novel immunostimulatory oligonucleotides that contain a non-palindromic sequence motif. Specifically, it refers to DNA oligonucleotides (without a CpG motif), which can stimulate an immune response in animals of the order of primate, including humans. The immune response is characterised by the proliferation, differentiation, cytokine and antibody production in B-cells, as well as cell differentiation and cytokine production in B-cells, as well as cell differentiation and invention describes immunomodulator compositions that also comprise an antigen selected from, for example, viruses, bacteria, parasites, tumour cells and glycoligids. As such, these DNA oligos can be used in generanellorating an immune system discorder or a tumoural disease including chronic myelogenous leukaemia, melanoma, Kaposi's sarcoma, and renal cell carcinoma. This oligonucleotide sequence is a non-CpG DNA oligo of the
                            Example 17; Page 80; 139pp; English.
```

```
Gарв
                                                                     ö
                               0.4%; Score 19.2; DB 1; Length 24;
llarity 87.5%; Pred. No. 1.8e+02;
Conservative 0; Mismatches 3; Indels
Sequence 24 BP; 0 A; 0 C; 3 G; 21 T; 0 U; 0 Other;
                                                                                                    5025 AAAAAAAAAAAAAAAAAAAA 5048
                                                                                                                                    24 AAAAACAAAAAAACAAAAAAAAA 1
                                                 Local Similarity
                                                                   21;
                                 Query Match
                                                                 Matches
                                                                                                    8
                                                                                                                                 셤
```

```
se; non-CpG; immunostimulatory; non-palindromic; immune response;
proliferation; differentiation; cytokine; antibody production; B-cell;
plasmacytoid dendritic cell; immunomodulator; gene therapy;
chronic myelogenous leukaemia; melanoma; Kaposi's sarcoma;
renal cell carcinoma.
                                                                                                                                                                                                                                                                                                                                      Non-CpG DNA oligonucleotide 36.
                                                    ADG76035 standard; DNA; 24 BP
                                                                                                                                                                                                                                           (first entry)
                                                                                                                                                                                                                                           11-MAR-2004
                                                                                                                                                ADG76035;
ADG76035/

XX ADG7

XX ADG7

XX ADG7

XX B8;

XW PF0]

XW PF0]

XW Chrc

XX Chrc

Ch
```

30-MAY-2003; 2003WO-EP005691 WO2003101375-A2. 11-DEC-2003 Synthetic.

30-MAY-2002; 2002CA-02388049

WPI; 2004-053333/05. Lopez RA;

(IMMU-) IMMUNOTECH SA

New immunostimulatory oligonucleotide comprising non-palindromic nucleic acid sequence motif, useful for inducing B-cell activation, treating, preventing or ameliorating immune system disorder or tumoral disease e.g. melanoma

Example 17; Page 81; 139pp; English.

This invention relates to novel immunostimulatory oligonucleotides that contain a non-palindromic sequence motif. Specifically, it refers to DNA oligonucleotides (without a CpG motif), which can stimulate an immune response in animals of the order of primate, including humans. The immune

```
ö
response is characterised by the proliferation, differentiation, cytokine and antibody production in B-cells, as well as cell differentiation and cytokine production in plasmacytoid dendritic cells. The present invention describes immunomodulator compositions that also comprise an antigen selected from, for example, viruses, bacteria, parasites, tumour cells and glycolipids. As such, these DNA oligos can be used in gene therapy for inducing B-cell activation, treating, preventing or the manual disease including chronic myelogenous leukaemia, melanoma, Kaposi's sarcoma, and renal cell carcinoma. This oligonucleotide sequence is a non-CpG DNA oligo of the
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      The invention discloses a microarray comprising a plurality of nucleic acid probes including one of 2,018,500 fully defined sequences, or its perfect match, perfect mismatch, antisense match or antisense mismatch. Also disclosed is a method of gene expression analysis. The array is used in monitoring gene expression levels by hybridisation to a DNA library, in analysis of genetic variation or in hybridisation of tag-labelled compounds. The nucleic acid probes are specifically designed for analysis of at least one target sequence. The method of analysis comprises hybridisation. The nucleic acid probes and detecting the hybridisation. The nucleic acid probes are attached to a solid support. The analysis comprises monitoring gene expression levels, identifying biallelic markers or polymorphisms, or family members of a gene and a cross-species comparison. Bach of the nucleic acids further comprises a tag sequence. The array of nucleic acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                New array of nucleic acid probes, useful for in situ hybridization, in Southern, Northern or dot-blot hybridization to identify or detect the sequence or specific mutations of any gene.
                                                                                                                                                                                                                                                                                                                                          Gape
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         EST; ss; probe; expressed sequence tag; microarray; gene expression; genetic variation; biallelic marker; polymorphism; human; cross-species comparison.
                                                                                                                                                                                                                                                                                                                                          ö
                                                                                                                                                                                                                                                                                          y Match 0.4%; Score 19.2; DB 1; Length 24; Local Similarity 87.5%; Pred. No. 1.8e+02; hes 21; Conservative 0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Human microarray DNA oligonucleotide SEQ ID NO 76254.
                                                                                                                                                                                                                                                       Sequence 24 BP; 0 A; 0 C; 3 G; 21 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Claim 1; SEQ ID NO 76254; 9pp; English.
                                                                                                                                                                                                                                                                                                                                                                                    5025 AAAAAAAAAAAAAAAAAAAA 5048
                                                                                                                                                                                                                                                                                                                                                                                                              24 AAAAACAAAAAACAAAAAAAAA 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    15-MAR-2002; 2002US-00098263.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              16-MAR-2001; 2001US-0276759P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ACI76263 standard; DNA; 25
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       (APFY-) AFFYMETRIX INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        WPI; 2003-567953/53.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 US2003104410-A1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Mittmann MP;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     14-OCT-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          05-JUN-2003
                                                                                                                                                                                                                  invention.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ACI76263;
                                                                                                                                                                                                                                                                                                Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ACI76263/c
ID ACI762
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           RESULT 322
                                                                                                                                                                                                                                                                                                                                          Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Ношо
      8868888888888888
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        g
                                                                                                                                                                                                                                                                                                                                                                                    ò
```

ð

```
The invention discloses a microarray comprising a plurality of nucleic acid probes including one of 2,018,500 fully defined sequences, or its perfect match, perfect mismatch, antisense match or antisense mismatch. Also disclosed is a method of gene expression analysis. The array is used in monitoring gene expression levels by pybridisation to a DNA library, in monitoring gene expression levels by pybridisation to a DNA library, in analysis of genetic variation or in hybridisation of tag-labelled compounds. The nucleic acid probes are specifically designed for analysis of at least one target sequence. The method of analysis comprises of at least one target sequence in the method of analysis comprises the pybridising at least one or more nucleic acids to at least two or more nucleic acids probes and detecting the hybridisation. The nucleic acid gene expression levels, identifying biallelic markers or polymorphisms, gene expression levels, identifying biallelic markers or polymorphisms, or family members of a gene and a cross-species comparison.

Sor family members of a gene and a cross-species comparison nucleic acids further comprises a tag sequence. The array of nucleic acid probes is useful in in situ hybridisation, in Southern, Northern or dotable thybridisation to identify or detect the sequence or specific
                                                                                                                                                                                                                                                                                                                    ö
    probes is useful in in situ hybridisation, in Southern, Northern or dot-
blot hybridisation to identify or detect the sequence or specific
mutations of any gene, in mapping the 5' termini of mRNA molecules by
primer extensions or in screening cDNA or genomic libraries or subclones
for additional subclones containing segments of DNA that have been
isolated and previously sequenced. The sequence presented is one of the
nucleic acid probes incorporated in the microarray. Note: The sequence
data for this patent can also be obtained in electronic format directly
from USPTO at seqdata.uspto.goc/sequence.html
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              New array of nucleic acid probes, useful for in situ hybridization, in Southern, Northern or dot-blot hybridization to identify or detect the sequence or specific mutations of any gene.
is useful in in situ hybridisation, in Southern, Northern or dot
                                                                                                                                                                                                                                                                                                                    Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            EST; ss; probe; expressed sequence tag; microarray; gene expression; genetic variation; biallelic marker; polymorphism; human;
                                                                                                                                                                                                                                                                                                                    ö
                                                                                                                                                                                                                                                                       Score 19.2; DB 1; Length 25; Pred. No. 1.8e+02;
                                                                                                                                                                                                                                                                                                                    3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Human microarray DNA oligonucleotide SEQ ID NO 76253.
                                                                                                                                                                                                                              Sequence 25 BP; 8 A; 8 C; 7 G; 2 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                         0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             claim 1; SEQ ID NO 76253; 9pp; English.
                                                                                                                                                                                                                                                                                                                                                                    80 ICTTGGGACTGGCGGTCTGCACTT 103
                                                                                                                                                                                                                                                                                                                                                                                                               24 rcrredeacrercearcecrr 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                BP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           16-MAR-2001; 2001US-0276759P
                                                                                                                                                                                                                                                                         ch 0.4%;
1 Similarity 87.5%;
21; Conservative C
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             15-MAR-2002; 2002US-00098263
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ACI76262 standard; DNA; 25
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            cross-species comparison.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   (AFFY-) AFFYMETRIX INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            WPI; 2003-567953/53.
                                                                                                                                                                                                                                                                              Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         US2003104410-A1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Mittmann MP;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        14-OCT-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     05-JUN-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ACI 76262;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       RESULT 323
                                                                                                                                                                                                                                                                                                                              Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ACI76262,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     8888888888888
                                                                                                                                                                                                                                                                                                                                                                                                                  셤
```

```
ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     The invention relates to a novel isolated DNA molecule (I) which is expressed in stressed microspores and comprises a specific partial sequence of a DNA molecule with a length of 10-50 base pairs. The isolated DNA molecule is useful to transfect a plant and can be used as a general tool for causing male sterility in plants. It is also useful for producing a totipotent call or a male sterile plant. The present sequence
                                                                                                                                                                                                   ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           New isolated DNA molecule that is expressed in stressed microspores, useful for causing male eterility in plants or for producing a totipotent
mutations of any gene, in mapping the 5' termini of mRNA molecules by primer extensions or in screening cDNA or genomic libraries or subclones for additional subclones containing segments of DNA that have been isolated and previously sequenced. The sequence presented is one of the
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       tobacco; stressed microspore; plant; transfect; male sterility;
                                               isolated and previously sequenced. The sequence presented is one of the nucleic acid probes incorporated in the microarray. Note: The sequence data for this patent can also be obtained in electronic format directly from USPTO at seqdata.uspto.goc/sequence.html
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Gaps
                                                                                                                                                                                                     Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ö
                                                                                                                                                                                                     ö
                                                                                                                                                                  0.4%; Score 19.2; DB 1; Length 25;
ilarity 87.5%; Pred. No. 1.8e+02;
Conservative 0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               0.4%; Score 19; DB 1; Length 19;
100.0%; Pred. No. 1.7e+02;
.ive 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sequence 19 BP; 2 A; 10 C; 5 G; 2 T; 0 U; 0 Other;
                                                                                                                                    Sequence 25 BP; 7 A; 8 C; 7 G; 3 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                          Tobacco plant PCR primer INT2 SEQ ID NO:6.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Heberle-Bors
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Example 3; SEQ ID NO 6; 65pp; English.
                                                                                                                                                                                                                                       80 TCTTGGGACTGGCGGTCTGCACTT 103
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 represents a N. tabacum PCR primer.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   5065 CTCGAGGGGGGCCCGGTA 5083
                                                                                                                                                                                                                                                               24 TCTTGGGACTGACGGTCGGCCTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                (ARCS-) ARC SEIBERSDORF RES GMBH.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     crceaeeeeeecceera 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  cell or a male sterile plant.
                                                                                                                                                                                                                                                                                                                                                           BB
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                06-NOV-2002; 2002AT-00001670.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                06-NOV-2003; 2003WO-EP012441
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Tashpulatov AS,
                                                                                                                                                                                                                                                                                                                                                           ADOS7809 standard; DNA; 19
                                                                                                                                                                                                                                                                                                                                                                                                                            12-AUG-2004 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Local Similarity 100.
Les 19; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               totipotent cell; primer.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 WPI; 2004-411521/38.
                                                                                                                                                                                           Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Nicotiana tabacum
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  WO2004042066-A2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                21-MAY-2004.
                                                                                                                                                                                                          21;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Touraev A,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         19
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Query Match
                                                                                                                                                                                                                                                                                                                                                                                             ADO57809;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               PCR;
                                                                                                                                                                         Query Match
Best Local &
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Matches
                                                                                                                                                                                                          Matches
                                                                                                                                                                                                                                                                                                                             RESULT 32
ADO57809/
                                                                                                                                                                                                                                                                                                                                                                           ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         셤
          8888888888
                                                                                                                                                                                                                                            ð
                                                                                                                                                                                                                                                                        g
```

```
888888888888888
                                                                                                                                                                                                                                          ð
                                                                                                                                                                                                                                                                  g
                                                                                                                                                                                                                                                                                                                                                  The invention describes a RNA interference (iRNA) agent (I) comprising a sense sequence and an antisense sequence, where the sense sequences have sense sequences have one or more asymmetrical 2'-O alkyl modifications, the antisense sequences have one or more asymmetrical phosphorothioate modifications and the antisense sequence targets a human gene sequence. Also described are: a pharmaceutical preparation comprising (I); reducing (M) appB-100 levels or glucose-6-phosphatase levels in a subject; producing (I); involves selecting a sequence with activity and introducing one or more asymmetrical modification in the sequence, where the modification decreases nuclease sensitivity while not decreasing its activity; a kit comprising (I) and instruction for its use; and a device that can be dispense or administer a composition comprising (I) is useful for reducing apoB-100 levels or glucose-6-phosphatase levels. The useful for reducing apoB-100 levels or glucose-6-phosphatase levels. The subject is suffering from a disorder characterised by elevated or otherwise unwanted expression of alsorder characterised by elevated or otherwise unwanted levels of levels of lipid metabolism. The
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Interference RNA agent useful for treating dyslipidemias, coronary artery disease, diabetes, cancer or neurological disease, comprises sense sequence and antisense sequence which has specific modifications.
                                                                                                                              antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic; cytostatic; anticonvulsant; nootropic; muscula; anti-HIV; RNA interference; iRNA; antieense technology; lipid metabolism; cholesterol imbalance; dyslipidaemia hypercholesterolaemia; coronary artery disease; CAD; coronary heart disease; CHD; atherosclerosis; hepatic glucose production; glucose-metabolism-related disorder; disease; cancer; breast cancer; colon cancer; lung cancer; nuclodical disease; Huntington disease; spinocerebellar ataxia; viral disease; ALDS; hepatitis C virus; HCV; ss.
                                                                                                        Hepatitis C virus (HCV) oligonucleotide segid 6759.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Example 5; SEQ ID NO 6759; 378pp; English
                         ADR82260 standard; DNA; 19 BP
                                                                                                                                                                                                                                                                                                                                                                                        2003US-0454265P.
                                                                                                                                                                                                                                                                                                                                                                                                                             14-APR-2003; 2003US-0462894P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                        2003US-0465665P.
2003US-0465802P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 2003US-0469612P.
2003US-0493986P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             2003US-0494597P.
2003US-0506341P.
                                                                                                                                                                                                                                                                                                                                                08-MAR-2004; 2004WO-US007070
                                                                                                                                                                                                                                                                                                                                                                                                                    2003US-0455050P
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 07-NOV-2003; 2003US-0518453P
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        2003US-0510246P
                                                                             (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Manoharan M, Bumcrot D;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            (ALNY-) ALNYLAM PHARM.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               WPI; 2004-677362/66.
                                                                                                                                                                                                                                                                  Hepatitis C virus.
                                                                                                                                                                                                                                                                                            WO2004080406-A2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                     25-APR-2003; 25-APR-2003; 29-MAY-2003; 2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             11-AUG-2003;
                                                                                                                                                                                                                                                                                                                                                                                                                  13-MAR-2003;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                08-AUG-2003;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        26-SEP-2003;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        09-OCT-2003;
                                                                                                                                                                                                                                                                                                                                                                                                    13-MAR-2003;
                                                                            16-DEC-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    10-OCT-2003;
                                                                                                                                                                                                                                                                                                                        23-SEP-2004
                                                   ADR82260;
```

```
ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic; cytostatic; anticonvulsant; nootropic; muscula; anti-HIV; RNA interference; iRNA; antisense technology; lipid metabolism; cholesterol imbalance; dyslipidaemia hypercholesterolaemia; coronary artery disease; CAD; coronary heart disease; CHD; atherosclerosis; hepatic glucose production; glucose-metabolism-related disorder; disease; huntingcon disease; spinocerebellar ataxia; viral disease; ALDS; hepatitis C virus; HCV; ss.
                      dyslipidaemias, hypercholestorolaemia, statin-resistant hypercholesterolaemia, coronary artery disease (CAD), coronary heart disease (CAD), coronary heart disease (CAD), coronary heart contains the caption of the reating successents and atherosclerosis. (I) is administered to a subject to inhibit hepatic glucose production or for treating glucose-metabolism-related disorder e.g. diabetes or type-2 diabetes. (I) is useful for treating the disease as mentioned above, cancer (e.g. breast, colon or lung cancer), neurological disease (e.g., Huntington disease or spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence represents a hepatitis C virus (HCV) antisense oligonucleotide that can be used to control HCV gene expression.
                                                                                                                                                                                                                                                                                                                                                                                                                                              Сарв
                                                                                                                                                                                                                                                                                                                                                                                                                                              ö
disorder is chosen from the HDL/LDL cholesterol imbalance,
                                                                                                                                                                                                                                                                                                                                                                                        Length 19;
                                                                                                                                                                                                                                                                                                                                                                                                                                           Indela
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Hepatitis C virus (HCV) oligonucleotide segid 6756.
                                                                                                                                                                                                                                                                                                                                 Sequence 19 BP; 0 A; 0 C; 0 G; 19 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                     0.4%; Score 19; DB 1; Le
100.0%; Pred. No. 1.7e+02;
ive 0; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  5025 AAAAAAAAAAAAAAAA 5043
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        19 AAAAAAAAAAAAAAA 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                2003US-0454265P.
2003US-0454962P.
2003US-0462894P.
2003US-0463772P.
2003US-046565P.
2003US-0465665P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          2003US-0493986P.
2003US-0494597P.
2003US-0506341P.
2003US-0510246P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     08-MAR-2004; 2004WO-US007070
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             2003US-0510318P
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    2003US-0518453P
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ADR82257 standard; DNA; 19
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            16-DEC-2004 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                 Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Manoharan M, Bumcrot D;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          (ALMY-) ALMYLAM PHARM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       WPI; 2004-677362/66.
                                                                                                                                                                                                                                                                                                                                                                                                               Local Similarity
nes 19; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Hepatitis C virus.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           WO2004080406-A2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            13-MAR-2003;
13-MAR-2003;
14-APR-2003;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                17-APR-2003;
25-APR-2003;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      25-APR-2003;
09-MAY-2003;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             08-AUG-2003;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            07-MAR-2003;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       11-AUG-2003;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    07-NOV-2003;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        12-MAR-2003;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   26-SEP-2003;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             09-OCT-2003;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 23-SEP-2004.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ADR82257;
                                                                                                                                                                                                                                                                                                                                                                                     Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                    Best Loca
Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            RESULT 326
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ADR82257/
```

2003US-0455050P. 2003US-0462894P. 2003US-0465665P. 2003US-0465665P. 2003US-0465802P. 2003US-046912P. 2003US-049959P. 2003US-0506341P.

07-NOV-2003; 2003US-0518453P

Manoharan M, Bumcrot D; (ALNY-) ALNYLAM PHARM.

WPI; 2004-677362/66.

2003US-0510318P

2003US-0452682P. 2003US-0454265P. 2003US-0454962P.

13-MAR-2003; 14-APR-2003; 17-APR-2003; 25-APR-2003; 09-MAY-2003; 38-AUG-2003; 11-AUG-2003; 26-SEP-2003; 09-OCT-2003;

```
Best Local Similarity 100.
Matches 19, Conservative
                                                                                                                                                 Hepatitis C virus.
                                                                                                                                                      WO2004080406-A2.
                                                                                                                                                          23-SEP-2004.
                                                                                                                  16-DEC-2004
                                                                                                              ADR82261;
                                                                                 Query Match
                                                                                                     RESULT 327
                                                                                                        ADR82261/
                                                                                                            ð
```

```
RESULT 328
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ADR82258/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Д×
a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ð
                                                                                                                                                                      The invention describes a kNA interference (lakkA) agent (1) comprising a gense sequence and an antisense sequence, where the sense sequences have one or more asymmetrical 2'-0 alkyl modifications, the antisense cone or more asymmetrical phosphorothicate modifications and the antisense sequence targets a human gene sequence. Also described are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100 levels or glucose-6-phosphatase levels in a subject; producing (I); exabilising (I), involves selecting a sequence with activity and introducing one or more asymmetrical modification in the sequence, where the modification decreases nuclease sensitivity while not decreasing its cortivity; a kit comprising (I) and instruction for its use; and a device that can be dispense or administer a composition comprising (I). (I) is useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (K1) is useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1) is useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (C) is useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M2) evels of cholesterol, and/or disregulation of lipid metabolism. The dispate is chosen from the HDL/LDL cholesterol imbalance, dyslipidaemias, hypercholesterolaemia, statin-resistant cornary heart construction and atherosclerosis. (I) is administered to a subject to inhibit hepatic glucose production or for treating glucose-metabolism-related disorder e.g. diabetes or type-2 diabetes. (I) is useful for represents a hepatitis C virus (HeV) antisense oligonucleotide that can be an exercised or corporary arrect (e.g., Huntington disease or processents and exercised or corporation or for treating glucose or corporation and an exercised or corporation or for treating glucose or corporation or for treating glucose or corporation or for treatin
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ö
Interference RNA agent useful for treating dyslipidemias, coronary artery disease, diabetes, cancer or neurological disease, comprises sense sequence and antisense sequence which has specific modifications.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          cytostatic; anticonvulsant; noctropic; muscula; anti-HV;
RNA interference; iRNA; antisense technology; lipid metabolism;
cholesterol imbalance; dyalipidaemia hypercholesterolaemia;
coronary artery disease; CAD; coronary heart disease; CHD;
atherosclerosis; hepatic glucose production;
glucose-metabolism-related disorder; diabetes; cancer; breast cancer;
colon cancer; lung cancer; neurological disease; Huntington disease;
spinocerebellar ataxia; viral disease; AIDS; hepatitis C virus; HCV; ss.
                                                                                                                                                                 invention describes a RNA interference (iRNA) agent (I) comprising a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ..
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       0.4%; Score 19; DB 1; Length 19; 100.0%; Pred. No. 1.7e+02; 1ve 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Hepatitis C virus (HCV) oligonucleotide seqid 6760.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sequence 19 BP; 0 A; 0 C; 0 G; 19 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      100.0%; Pred. No. 1.7 iive 0; Mismatches
                                                                                                                 Example 5; SEQ ID NO 6756; 378pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       gene expression.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     5025 AAAAAAAAAAAAAAA 5043
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        19 AAAAAAAAAAAAAAAA 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ADR82261 standard; DNA; 19 BP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         (first entry)
```

```
The invention describes a kNA interierence (IKNA) agent (1) compitibility a gense sequence and an antisense sequence, where the sense sequences have one or more asymmetrical 2. O alkyl modifications, the antisense sequence asymmetrical phosphorothioact modifications are approached asymmetrical phosphorothioact modifications are applicable antisense sequence targets a human gene sequence. Also described are: a pharmaceutical preparation comprising (1); reducing (M1) apoB-100 are: a pharmaceutical preparation comprising (1); reducing (M1) apoB-100 levels or glucose-6-phosphatase levels in a subject; producing (1); contained a sequence with activity and introducing one or more asymmetrical modification in the sequence, where the modification decreases nuclease sensitivity while not decreasing its activity; a kit comprising (1) and instruction for its use; and a device that can be dispense or administer a composition comprising (1). (1) is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.

CC therwise unwanted expression of apucose-6-phosphatase levels.

The subject is suffering from a disorder characterised by elevated or otherwise unwanted expression of apol-100, elevated or otherwise unwanted contevers and a disorder characterised by elevated or otherwise unwanted expression of apol-100, elevated or otherwise unwanted disorder is chosen from the HDL/LDL cholesterol imbalance, disparate (CC dyslipidaemias, hypercholesterolaemia, statin-resistent CC dyslipidaemias, hypercholesterolaemia, coronary artery disease (CAD), coronary heart conhibit hepatic glucose production or for treating glucose-metabolism. The disease samentioned above, cancer (e.g. breast, colon or treating the diseases as mentioned above, cancer (e.g. breast, colon or treating the diseases as mentioned above, cancer (e.g. breast, colon or treating the diseases as mentioned electroned disease or epinesemblar ataxia) or viral disease (e.g., Hunisance), his sequence epinasciple decreases as mentioned electroned disease or epinesers 
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ö
Interference RNA agent useful for treating dyslipidemias, coronary artery disease, diabetes, cancer or neurological disease, comprises sense sequence and antisense sequence which has specific modifications.
                                                                                                                                                                                                                                                                                                      The invention describes a RNA interference (iRNA) agent (I) comprising a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ó,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Length 19;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Sequence 19 BP; 0 A; 0 C; 0 G; 19 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Score 19; DB 1; Le
Pred. No. 1.7e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   100.0%; Preq. ...
                                                                                                                                                                                                              Example 5; SEQ ID NO 6760; 378pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   5025 AAAAAAAAAAAAAAA 5043
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          0.4%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Local Similarity 100.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Matches
```

19 дададададададада 1

ADR82258 standard; DNA; 19 BP

08-MAR-2004; 2004WO-US007070.

```
cancernorm describes a range agencie, where the sense sequences have one or more asymmetrical 2'-O alkyl modifications, the antisense sequence and an antisense sequence where the sense sequences have one or more asymmetrical phosphorothioate modifications and the antisense sequence targets a human gene sequence. Also described are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100 evels or glucose-6-phosphatase levels in a subject; producing (I); stabilising (I); involves selecting a sequence with activity and carbilising one or more asymmetrical modification in the sequence, where the modification decreases nuclease sensitivity while not decreasing its activity; a kit comprising (I) and instruction for its use; and a device that can be dispense or administer a composition comprising (I). (I) is custing for reducing apoB-100 levels or glucose-6-phosphatase levels. The subject is suffering from a disorder characterised by elevated or cherwise unwanted expression of apos-100, elevated or cherwise unwanted expression elevated or cherwise unwanted expression elevated or elevated or elevated or che
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Interference RNA agent useful for treating dyslipidemias, coronary artery disease, diabetes, cancer or neurological disease, comprises sense sequence and antisense sequence which has specific modifications.
                                                                                                                                                    antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic; cytostatic; anticonvulsant; nootropic; muscula; anti-HIV; RNA interference; iRNA; antisense technology; lipid metabolism; cholesterol imbalance; dyslipidaemia hypercholesterolaemia; coronary artery disease; CAD; coronary heart disease; CHD; atherosclerosis; hepatic glucose production; glucose-metabolism-related disorder; diabetes; cancer; breast cancer; oclon cancer; lung cancer; neurological disease; Huntington disease; spinocerebellar ataxia; viral disease; ALDS; hepatitis C virus; HCV; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              The invention describes a RNA interference (iRNA) agent (I) comprising
                                                                                                        Hepatitis C virus (HCV) oligonucleotide segid 6757
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Example 5; SEQ ID NO 6757; 378pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 13-MAR-2003; 2003US-0455050P.
17-APR-2003; 2003US-0455050P.
17-APR-2003; 2003US-046565P.
25-APR-2003; 2003US-0465662P.
09-MAY-2003; 2003US-0465612P.
08-AUG-2003; 2003US-049599F.
26-SEP-2003; 2003US-049459PP.
26-SEP-2003; 2003US-050341P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       2003US-0454265P.
2003US-0454962P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     08-MAR-2004; 2004WO-US007070
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          2003US-0510318P
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     07-NOV-2003; 2003US-0518453P
                                                    16-DEC-2004 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Manoharan M, Bumcrot D;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    (ALNY-) ALNYLAM PHARM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             WPI; 2004-677362/66.
                                                                                                                                                                                                                                                                                                                                                                                                                          Hepatitis C virus.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               WO2004080406-A2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            07-MAR-2003;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                13-MAR-2003;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   23-SEP-2004
  ADR82258;
```

```
ô
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Interference RNA agent useful for treating dyslipidemias, coronary artery disease, diabetes, cancer or neurological disease, comprises sense sequence and antisense sequence which has specific modifications.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic; cytostatic; anticonvulsant; nootropic; muscula; anti-HIV; MAX interference; iRNA; antisense technology; liptid metabolism; cholesterol imbalance; dyslipidaemia hypercholesterolaemia; coronary artery disease; CAD; coronary heart disease; CHD; atherosclerosis; hepatic glucose production; glucose-metabolism-related disorder; diabetes; cancer; breast cancer; colon cancer; lung cancer; neurological disease; Huntington disease; spinocerebellar ataxia; viral disease; ALDS; hepatitis C virus; HCV; ss.
inhibit hepatic glucose production or for treating glucose-metabolism-related disorder e.g. diabetes or type-Z diabetes. (1) is useful for treating the diseases as mentioned above, cancer (e.g. breat, colon or lung cancer), neurological disease (e.g., Huntington disease or spinocerbellar ataxia) or viral disease (e.g., AIDS). This sequence represents a hepatitis C virus (HCV) antisense oligonucleotide that can be used to control HCV gene expression.
                                                                                                                                                                                                     Gape
                                                                                                                                                                                                    ö
                                                                                                                                                                    Length 19;
                                                                                                                                                                                                    0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                           Hepatitis C virus (HCV) oligonucleotide segid 6755.
                                                                                                                                   Sequence 19 BP; 0 A; 0 C; 0 G; 19 T; 0 U; 0 Other;
                                                                                                                                                                 0.4%; Score 19; DB 1; Le
100.0%; Pred. No. 1.7e+02;
ative 0; Mismatches 0;
                                                                                                                                                                                                                                     5025 AAAAAAAAAAAAAAA 5043
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            13-MAR-2003; 2003US-0454962P.
13-MAR-2003; 2003US-0454962P.
13-APR-2003; 2003US-0455050P.
17-APR-2003; 2003US-046594P.
25-APR-2003; 2003US-0465665P.
25-APR-2003; 2003US-0465602P.
09-MAY-2003; 2003US-046969P.
11-AUG-2003; 2003US-046969P.
26-SEP-2003; 2003US-046959P.
26-SEP-2003; 2003US-0506341P.
                                                                                                                                                                                                                                                            AAAAAAAAAAAAAAAAA 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 08-MAR-2004; 2004WO-US007070
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  2003US-0454265P
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        2003US-0510318P
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        07-NOV-2003; 2003US-0518453P
                                                                                                                                                                                                                                                                                                                                                       ADR82256 standard; DNA; 19
                                                                                                                                                                                                                                                                                                                                                                                                                           16-DEC-2004 (first entry)
                                                                                                                                                             Ouery Match
Best Local Similarity 100.0
Matches 19, Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ä
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Bumcrot
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         (ALNY-) ALNYLAM PHARM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          WPI; 2004-677362/66.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Hepatitis C virus.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              WO2004080406-A2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Manoharan M,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    12-MAR-2003;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 23-SEP-2004.
                                                                                                                                                                                                                                                                                                                                                                                          ADR82256;
                                                                                                                                                                                                                                                                      19
                                                                                                                                                                                                                                                                                                                       RESULT 329
                                                                                                                                                                                                                                                                                                                                       ADR82256/
ID ADR8
 និន្តិនិនិនិនិនិនិនិនិ
                                                                                                                                                                                                                                                                                                                                                                          ð
                                                                                                                                                                                                                                                                   요
```

2003US-0462894P. 2003US-0463772P. 2003US-0465665P.

 $\overset{\alpha}{\times}\overset{\times}{\times}\overset{\circ}{\times}\overset{\overset{\circ}{\times}\overset{\circ}{\times}\overset{\circ}{\times}\overset{\circ}{\times}\overset{\circ}{\times}\overset{\circ}{\times}\overset{\circ}{\times}\overset{\circ}{\times}\overset{\circ}{\times}\overset{\circ}{\times}\overset{\circ}{\times}\overset{\circ}{\times}\overset{\circ}{\times}\overset{\circ}{\times}\overset{\circ}{\times}\overset{\circ}{\times}\overset{\circ}{\times}\overset{\circ}{\times}\overset{\overset{\circ}{\times}\overset{\circ}{\times}\overset{\circ}{\times}\overset{\circ}{\times}\overset{\circ}{\times}\overset{\circ}{\times}\overset{\circ}{\times}\overset{\circ}{\times}\overset{\circ}{\times}\overset{\circ}{\times}\overset{\circ}{\times}\overset{\circ}{\times}\overset{\circ}{\times}\overset{\circ}{\times}\overset{\circ}{\times}\overset{\circ}{\times}\overset{\circ}{\times}\overset{\circ}{\times}\overset{\overset$ 

```
14-APR-2003;
                                          17-APR-2003;
25-APR-2003;
ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ద
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   BXXXEX
                                                            The invention describes a kNA interference (ixAA) agong (i) compitating a gense sequence and an antisense sequence, where the sense sequences have one or more asymmetrical phosphorothicate modifications and the antisense sequence targets a human gene sequence. Also described are: a pharmaceutical preparation comprising (I); reducing (MI) apob-100 are: a pharmaceutical preparation comprising (I); reducing (MI) apob-100 stabilising (I), involves selecting a sequence with activity and introducing one or more asymmetrical modification in the sequence, where introducing one or more asymmetrical modification in the sequence, where critically a kit comprising (I) and instruction for its use; and a device the modification descrass or administer a composition comprising (I). (I) is activity; a kit comprising (I) and instruction for its use; and a device that can be dispense or administer a composition comprising (I). (I) is useful for reducing apob-100 levels or glucose-6-phosphatase levels. (MI) is useful for reducing apob-100 levels or glucose-6-phosphatase levels. (MI) is useful for reducing apob-100 levels or glucose-6-phosphatase levels. (MI) is useful for reducing apos-100 levels or glucose-6-phosphatase levels. (MI) is useful for reducing apos-100 levels or glucose-6-phosphatase levels. (MI) is useful for some from the HDL/LDL cholesterol imbalance, discase (CHD) and atherosclerosis (I) is administered to a subject to inhibit hepatic glucose-production or for treating glucose-metabolism-crolated diseases as mentioned above, cancer (e.g. breast, colon or treating the diseases as mentioned above, cancer (e.g. breast, colon or treating the diseases as mentioned above, cancer (e.g. breast, colon or treating the diseases as mentioned above, cancer (e.g. breast, colon or treating the diseases as mentioned above, cancer (e.g. breast, colon or treating the diseases as mentioned e.g., Huntington disease or captured to a subject to spinocerbellar ataxia) or viral disease (e.g., Huntington disease or represents a hepatitis 
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         cytostatic; anticonvulsant; notropic; muscula, anti-HIV;
RNA interference; iRNA; antisense technology; lipid metabolism;
cholesterol imbalance; dyslipidaemia hypercholesterolaemia;
coronary artery disease; CAD; coronary heart disease; CHD;
atherosclerosis; hepatic glucose production;
glucose-metabolism-related disorder; diabetes; cancer; breast cancer;
colon cancer; lung cancer; neurological disease; Huntington disease;
spinocerebellar ataxia; viral disease; AIDS; hepatitis C virus; HCV; ss.
                                                  The invention describes a RNA interference (iRNA) agent (I) comprising a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   0.4%; Score 19; DB 1; Length 19;
100.0%; Pred. No. 1.7e+02;
tive 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Hepatitis C virus (HCV) oligonucleotide seqid 6758.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Sequence 19 BP; 0 A; 0 C; 0 G; 19 T; 0 U; 0 Other;
     Example 5; SEQ ID NO 6755; 378pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             5025 AAAAAAAAAAAAAAA 5043
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            19 AAAAAAAAAAAAAAA 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ADR82259 standard; DNA; 19 BP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             07-MAR-2003; 2003US-0452682P.
12-MAR-2003; 2003US-0454265P.
13-MAR-2003; 2003US-0454962P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                08-MAR-2004; 2004WO-US007070.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Matches 19; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Hepatitis C virus.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 WO2004080406-A2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             16-DEC-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   23-SEP-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ADR82259;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           RESULT 330
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ADR82259/
```

8 셤

```
The invention describes a RNA interference (IRNA) agent (I) comprising a sense sequence and an antisense sequence, where the sense sequences have one or more asymmetrical 2'-0 alkyl modifications, the antisense concerns and the antisense sequence targets a human gene sequence. Also described and the antisense sequence targets a human gene sequence. Also described are: a pharmaceutical preparation comprising (I); reducing (II); and preparation comprising (II); reducing (II); involves selecting a sequence with activity and stabilising (II), involves selecting a sequence with activity and introducing one or more asymmetrical modification in the sequence, where controducing one or more asymmetrical modification in the sequence, where introducing one or more asymmetrical modification in the sequence, where contrivity a kit comprising (I) and instruction for its use; and a device that can be dispense or administer a composition for its use; and a device that can be dispense or administer a composition comprising (I). II is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.

Cuseful for reducing apoB-100 levels or glucose-6-phosphatase levels.

Cuterwise unwanted expression of apoB-100, elevated or otherwise unwanted elevated is chosen from the HDJ/LDL cholesterol imbalance,

Cuseful diseases as mentorioned above, cancer (CC inhibit hepatic glucose production or for treating glucose-metabolism-related diseases as mentored as mentored (CC inhibit phapatic glucose production or for treating glucose-metabolism-related diseases as mentored (CC) inhibit phapatic glucose production or for treating glucose-form or for treating glucose-f
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Interference RNA agent useful for treating dyslipidemias, coronary artery disease, diabetes, cancer or neurological disease, comprises sense sequence and antisense sequence which has specific modifications.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       0.4%; Score 19; DB 1; Length 19;
100.0%; Pred. No. 1.7e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Sequence 19 BP; 0 A; 0 C; 0 G; 19 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    / Match
Local Similarity 100.0%; Pred. No. 1...
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Example 5; SEQ ID NO 6758; 378pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             be used to control HCV gene expression
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       5025 AAAAAAAAAAAAAAAA 5043
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            19 AAAAAAAAAAAAAAAAA 1
2003US-0465802P.
2003US-0469612P.
2003US-0493986P.
2003US-0494597P.
2003US-051024F.
2003US-0510246P.
2003US-0510348.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ВР
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AAT32292 standard; DNA; 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       16-FEB-1997 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                        Manoharan M, Bumcrot D;
                                                                                                                                                                                                                                                                                                                                                                   (ALNY-) ALNYLAM PHARM.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  WPI; 2004-677362/66.
    25-APR-2003;
09-MAY-2003;
08-AUG-2003;
11-AUG-2003;
                                                                                                                                                                   26-SEP-2003;
                                                                                                                                                                                                   09-OCT-2003;
                                                                                                                                                                                                                                                                                 07-NOV-2003;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AAT32292;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       RESULT 331
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AAT32292
```

ö

gibbs-10-667-022-4.rng

```
WPI; 2001-489657/54.
                                                                                                                                                                                                                                                                                                                               (all claimed)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                26-NOV-1999;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     26-NOV-1999;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CN1297918-A.
   14-AUG-2003.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                26-OCT-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            06-JUN-2001
                                                                                    Schwab M,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AAH75578;
                                                                                                                                                                                                                                                                                                                                                                                                                                     22
                                                                                                                                                                                                                                                                                                                                                                         Query Match
                                                                                                                                                            anemia.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  RESULT 333
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                   요
                                                                                                                                                                                                                                                                                                                                                                                                                                                          ö
                                                                                                                                                                                                                                                                                              for recovery of cells or clumps of cells, especially pancreatic islets or tumour cells. The tumour cells can be modified ex vivo and then returned to the patient (adoptive immunotherapy). After tissue degradation, the cells or clumps of cells are separated by centrifugation and on density gradients. The protease is produced by recombinant techniques. Primers used for manipulation of the protease coding sequence were synthesised based on peptide fragments of the protease. The primers are described in AAT32287-96. This primer used to amplify a 320 base pair partial sequence of the protease coding sequence which was then used for sequence
                                                                                                                                                                                                                                                                                    The neutral protease of Clostridium hystolyticum is used to digest tissue
                     Clostridium histolyticum; neutral protease; digestion; tissue; degradation; pancreatic islets; tumour; adoptive immunotherapy; cell.
                                                                                                                                                                                                                                                                                                                                                                                                                                                          Gaps
                                                                                                                                                                                                                      Nucleic acid encoding neutral protease of Clostridium histolyticum - useful for tissue digestion and release of constituent cells or cell
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           /*tag= a
/standard_name= "Single nucleotide polymorphism"
                                                                                                                                                                                                                                                                                                                                                                                                                                                          ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Thiopurine S-methyltransferase; TPMT; enzyme; SNP; single nucleotide polymorphism; immunostimulant; haemostatic; antianaemic; gastrointestinal; ds.
                                                                                                                                                                                                                                                                                                                                                                                                                                   0.4%; Score 18.4; DB 1; Length 20; 95.0%; Pred. No. 2e+02; ive 0; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Thiopurine S-methyltransferase exon 5 SNP region.
                                                                                                                                                                                                                                                                                                                                                                                                                Sequence 20 BP; 6 A; 6 C; 3 G; 5 T; 0 U; 0 Other;
Primer for manipulation of Clostridium protease.
                                                                                                                                                                               Hesse F, Ambrosius D, Burtscher H;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Location/Qualifiers
replace(11,A)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             817 TGTCTACCTTTCCAGAAGC 836
                                                                                                                                                                                                                                                                 Example 2; Page 24; 35pp; German.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         (BOEF ) BOEHRINGER MANNHEIM GMBH
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ACF79629 standard; DNA; 22 BP
                                                                                                                  95WO-EP005054.
                                                                                                                                      94DE-04445891.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                        Matches 19; Conservative
                                                                                                                                                                                                  WPI; 1996-309597/31
                                                                                                                                                                                                                                                                                                                                                                                                                                              Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         WO2003066892-A1
                                                                         WO9619583-A1.
                                                                                                                20-DEC-1995;
                                                                                                                                      22-DEC-1994;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Homo sapiens
                                                                                             27-JUN-1996.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              18-DEC-2003
                                                     Synthetic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                variation
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  -
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ACF79629;
                                                                                                                                                                                                                                                                                                                                                                                                                                     Query Match
                                                                                                                                                                                                                                              groups.
  g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ઠે
```

```
ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  The present sequence is that of a polymorphic site identified in exon 5 of the human thiopurine S-methyltransferase (TPWT) gene. This single nucleotide polymorphism (SNP) is a C at position 463 of the TPWT gene, and results in a Kily9r amino acid substitution (see ABR63163) in the TPWT protein. It is one of six newly identified SNPs in the TPWT gene that lead to low TPWT activity. A polymucleotide comprising the present sequence (sense or complementary strand) is claimed. Polymorphic TPWT polymertical substitutions for diagnosing or treating a TPWT-associated disease, or a succeptibility to such a disease, thiopurine-induced toxicity, myelosuppression (Pancytopaenia) and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             gastrointestinal disturbances, leukopaenia, thrombocytopaenia, or anaemia
                                                                                                                                                                                                                                                                                                                                                                                           New thiopurine S-methyltransferase (TPMT) polynucleotide, useful for preparing diagnostic and pharmaceutical compositions for diagnosing and treating a TPMT-associated disease, e.g. leukopenia, thrombocytopenia or
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Human transcription termination factor binding protein 54 PCR primer 2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Gapa
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Human; transcription termination factor binding protein 54; disease; malignant tumour; nosohaemia; HIV; human immunodeficiency virus; infection; immunological disease; inflammation; PCR primer; 88.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             0.4%; Score 18.4; DB 1; Length 22; 95.0%; Pred. No. 2e+02; ive 0; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Sequence 22 BP; 7 A; 5 C; 5 G; 5 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                (SHAN-) SHANGHAI BORONG GENE DEV CO LTD.
                                                                                                                                                      (EPID-) EPIDAUROS BIOTECHNOLOGIE AG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1731 CCTTAAATACTGTGATTCCA 1750
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Claim 1; Page 34; 63pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ccrraaaracreregricca 3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 99CN-00124126.
04-FEB-2003; 2003WO-EP001090.
                                                                               04-FEB-2002; 2002EP-00001978.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                99CN-00124126
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AAH75578 standard; DNA; 23
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              (first entry)
                                                                                                                                                                                                                                         Schaeffeler E;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Best Local Similarity 95.0
Matches 19; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Mao Y, Xie Y, Gin Y;
                                                                                                                                                                                                                                                                                                                         WPI; 2003-627758/59.
```

```
The present invention describes a method for the recombination of nucleic acid (NA) templates. The method comprises: (a) providing at least two double-stranded templates (T1, T2) having different 5' and 3' regions in their sense strands; (b) around the templates with at least one each of forward and reverse primers that anneal, respectively, only to the 3'-region of the antisense strand of T1 and to the 3'-region of the sense strand of T2; (c) extending the primers by no more than 100 nucleotides trand of T2; (c) extending the primers by no more than 100 nucleotides (i); (d) separating extended primers, to either templates; (e) reannealing the extended primers, to either templates; (e) reannealing the extended primers, to either templates; (e) cycles of steps (b)-(e) until at least one full-length extended: (l) a method starting from at least one each of antisense and sense singlestranded templates; (2) generating a recombined polypeptide (I) with altered properties by expressing recombination products of the new
                                                                                                                                                                                                                                                                                            ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Recombination of nucleic acid templates, useful e.g. for producing enzymes with altered properties, is based on cyclic extension of unpaired
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Rhodosporidium mutant TAL enzyme 3' region oligonucleotide SEQ ID NO:201.
       Human transcription termination factor binding protein 54 as one new kind of polypeptide and polynucleotides encoding this polypeptide.
                                                                                              The invention relates to human transcription termination factor binding protein 54 useful in treating various diseases, such as malignant tumour, nosobaemia, HIV infection, immunological diseases and inflammations. The present sequence is that of a human transcription termination factor binding protein 54 PCR primer of the invention
                                                                                                                                                                                                                                                                                            Gaps
                                                                                                                                                                                                                                                                                            ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                nucleic acid template; recombined polypeptide;
                                                                                                                                                                                                                                                  0.4%; Score 18.4; DB 1; Length 23; 95.0%; Pred. No. 2.1e+02; tive 0; Mismatches 1; Indels
                                                                                                                                                                                                                 Sequence 23 BP; 9 A; 0 C; 4 G; 10 T; 0 U; 0 Other;
                                                                   Example 3; Page 17 Disclosure; 28pp; Chinese.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Disclosure, SEQ ID NO 201; 481pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   i.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      altered property; combined gene; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     M
                                                                                                                                                                                                                                                                                                                                   4910 GAAAATGAATATGTTTATTT 4929
                                                                                                                                                                                                                                                                                                                                                                       21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   (DUPO ) DU PONT DE NEMOURS & CO
                                                                                                                                                                                                                                                                                                                                                             2 GTAAATGAATATGTTTATTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          26-FEB-2003; 2003WO-US005708
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             26-FEB-2002; 2002US-0360279P
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ADE36253 standard; DNA; 24
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               (first entry)
                                                                                                                                                                                                                                                                                                Matches 19; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          WPI; 2003-721766/68.
                                                                                                                                                                                                                                                              Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Tang X;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     WO2003072743-A2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Synthetic.
Rhodosporidium.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          recombination;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             29-JAN-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        04-SEP-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Milano J,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ADE36253;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         primers
                                                                                                                                                                                                                                                                                                                                                                                                                                  RESULT 334
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      g
ઠે
```

```
The present invention describes a mouse (I), homozygous for a disruption in the alpha-L-iduronidase (IDUA) gene but with normal expression of the in the alpha-L-iduronidase (IDUA) gene but with normal expression of the heaptic sulphate transporter SAT-1 gene. (I) is used to evaluate the adents for use in treating mucopolysaccharidosis Type I (MPS 1) by administering the agent to (I) and evaluating the mouse for pathology associated with iduronidase deficiency. (I) may also be used to pathology associated with iduronidase deficiency. (I) may also be used to a specific tissue or organ in the mouse using the same techniques. Targeting systems which may be tested using this regime include a target-complection aspecific label, a viral expression vector or a liposome coupled to pathology of MPS I. The SAT-1 gene overtalps with the IDUA gene but in (I) pathological effects observed in (I) are due solely to the disruption of the IDUA gene. The present sequence represents a IDUA genomic DNA
                                                                                                                                                                                                                                                                                  ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                New transgenic mouse, useful for modeling lysosomal disorders and testing cell- or tissue-specific targeting systems.
processes and screening the polypeptides formed for properties different from those of polypeptides from either of the templates; and (3) (1) produced by method (2). The methods are useful for the recombination of nucleic acid templates of interest, and generation of a recombined polypeptide having altered properties. The method can be used to make combined genes that express proteins e.g. enzymes, cytokines, growth factors, viral proteins or microbial antigens with altered properties, e.g. stability, activity or specificity. The present sequence is used in the exemplification of the present invention.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Murine; mouse; alpha-L-iduronidase; IDUA; hepatic sulphate transporter; SAT-1; mucopolysaccharidosis type I; MPS I; transgenic mouse; cell.specific targeting system; tissue-specific targeting system; lysosomal disorder; ss.
                                                                                                                                                                                                                                                                                      Gaps
                                                                                                                                                                                                                                                                                    ;
0
                                                                                                                                                                                                                                        0.4%; Score 18.4; DB 1; Length 24; 95.0%; Pred. No. 2.1e+02; Live 0; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Murine alpha-L-iduronidase genomic DNA oligonucleotide #3.
                                                                                                                                                                                                       Sequence 24 BP; 2 A; 7 C; 12 G; 3 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                            5063 AACTCGAGGGGGGCCCGGT 5082
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Example 3; Page 12; 20pp; English.
                                                                                                                                                                                                                                                                                                                                                                      5 AgcircaAgagagagaccagar 24
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     COLUMBIA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     COLUMBIA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ВЪ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       97CA-02205710.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             96US-0017156P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AAZ07017 standard; DNA; 24
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      09-NOV-1999 (first entry)
                                                                                                                                                                                                                                                     Query Match 0.4
Best Local Similarity 95.0
Matches 19; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                (UYBR-) UNIV BRITISH (UYBR-) UNIV BRITISH
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Clarke LA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   WPI; 1999-494691/42.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         20-MAY-1997;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             20-MAY-1996;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   20-NOV-1997.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CA2205710-A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AAZ07017;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Jirik F,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Mus sp.
                                                                                                                                                                                                                                                                                                                                                                                                                                       RESULT 335
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             888888888888888
                                                                                                                                                                                                                                                                                                                                      ð
                                                                                                                                                                                                                                                                                                                                                                        셤
```

ઠ

```
BP.
                                                                                                    21-MAY-2001; 2001WO-CN000845
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                05-JAN-2001; 2001CN-00105028
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    05-JAN-2001; 2001CN-00105028
                                                                                                                        24-MAY-2000; 2000CN-00115849
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1876/c
ABZ59876 standard; DNA; 24
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        (BODE-) BODE GENE DEV
                                                                                                                                                                                    WPI; 2002-090030/12.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                WPI; 2003-000303/01.
                                                                                                                                                                                                                                                                                                                                                                                Local Similarity
les 20; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Human; protease
infection; PCR;
                                                            WO200192318-A1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Mao Y, Xie Y;
                                        Unidentified
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              10-MAY-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CN1363562-A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             14-AUG-2002
                                                                                 06-DEC-2001
                                                                                                                                                                                                                                                                                                                                                                        Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ABZ59876;
                                                                                                                                                                Mao Y,
                                                                                                                                                                                                                                                                                                                                                                                            Aatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  RESULT 338
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ABZ59876,
 g
                                                                                                                                                                                                                                                                                                                                                                                                                 ઠ
                                                            ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                              The invention relates to a novel human zinc finger protein 27.50, and the polymucleotide encoding it. The polypeptide is useful for treating several diseases, such as solid tumour, nervous system disease, malignant disease of blood, development disturbance and HIV infection. The sequence represents a PCR primer used in example 3 of the invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Kringle protein 14; cytostatic; haemostatic; virucide; immunomodulatory;
                                                            Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Gaps
oligonucleotide used in the exemplification of the present invention
                                                            ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                0.4%; Score 18.2; DB 1; Length 24; 87.0%; Pred. No. 2.2e+02; tive 0; Mismatches 3; Indels
                                         24;
                                                            3; Indels
                                       Query Match 0.4%; Score 18.2; DB 1; Length Best Local Similarity 87.0%; Pred. No. 2.2e+02; Matches 20; Conservative 0; Mismatches 3; Indels
                    Sequence 24 BP; 20 A; 4 C; 0 G; 0 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Sequence 24 BP; 5 A; 0 C; 0 G; 19 T; 0 U; 0 Other;
                                                                                                                                                                                                                                    Human; zinc finger protein 27.50; PCR; primer; 88.
                                                                                                                                                                                                                                                                                                                                                                                                                                             Example 3; Page 17 (Disclosure); 31pp; Chinese.
                                                                                                                                                                                                                 Human zinc finger protein 27.50 PCR primer 2.
                                                                                                                                                                                                                                                                                                                                                             (SHAN-) SHANGHAI BIODOOR GENE DEV CO LTD.
                                                                                5043 AAAAAAAAAAAAAAAAAAAA
                                                                                                                                                                                                                                                                                                                                                                                                                          Novel human zinc finger protein 27.50
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          5024 TAAAAAAAAAAAAAAAAAAA 5046
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Kringle protein 14, RT-PCR primer #2.
                                                                                                   1 AAACAAAAACAAAAAACAAAAC 23
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          24 TAAAAATAAAATAAAAA 2
                                                                                                                                                                                                                                                                                                                       07-SEP-2000; 2000CN-00125059
                                                                                                                                                                                                                                                                                                                                          07-SEP-2000; 2000CN-00125059
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AAS19218 standard; DNA; 24
                                                                                                                                                      ABQ78896 standard; DNA; 24
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        (first entry)
                                                                                                                                                                                              (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Query Match
Best Local Similarity 87.0
Matches 20; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                      WPI; 2002-520724/56.
                                                                                                                                                                                                                                                                                                                                                                                  Xie Y;
                                                                                                                                                                                                                                                           Homo sapiens.
                                                                                                                                                                                              17-OCT-2002
                                                                                                                                                                                                                                                                             CN1341649-A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        09-APR-2002
                                                                                                                                                                                                                                                                                                 27-MAR-2002
                                                                                                                                                                         ABQ78896;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AAS19218
                                                                                                                                                                                                                                                                                                                                                                                 Mao Y,
                                                                                                                                  RESULT 336
ABQ78896/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             RESULT 337
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AAS19218
                                                                                                                                                      ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  SXS
                                                                                                  셤
```

```
The invention relates to an isolated polypeptide (I) of Kringle protein 14 and the polypuclectoride (II) encoding (I). (I) and (II) are used in diagnosis and treatment of malignant tumour, haemopathy, human immunodeficiency virus (HIV) infection, immunological diseases and various inflammations. The present sequence represents a reverse transcriptase (RT)-PCR primer used to isolate the coding sequence of kringle protein 14 as described in the invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Kringle protein 14 and encoding polynucleotide, used in diagnosis and treatment of malignant tumors, hemopathy, human immunodeficiency virus infection, immunological diseases and inflammation.
antiinflammatory; malignant tumour; haemopathy; inflammation; primer;
human immunodeficiency virus; HIV; immunological disease; RT-PCR; 88;
reverse transcriptase PCR.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Gape
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     regulatory protein 28.27; cancer; cytostatic; HIV; primer; 88.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Human protease regulatory protein 28.27 PCR primer SEQ ID NO 3.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 0.4%; Score 18.2; DB 1; Length 24; ilarity 87.0%; Pred. No. 2.2e+02; Conservative 0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Sequence 24 BP; 20 A; 3 C; 0 G; 1 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               (SHAN-) SHANGHAI BIOWINDOW GENE DEV INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CO LTD SHANGHAI.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    5025 AAAAAAAAAAAAAAAAAA 5047
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     2 AAAAACAAAACAAAAATAAAA 24
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Example 2; Page 17; 37pp; Chinese.
```

ô

```
The invention describes a method of typing (M1) a gene (I) that has one or more polymorphic microsatellite loci (PML). The method comprises: PCR amplification of at least one DNA region of (I) that includes PML, using as template a DNA sample containing at least one segment of (I); and determining the length of the resulting amplicon(s). Also described are: a method of determining (M2) microsatellite markers (WM) for predisposition to a disease, associated with a gene that includes one or more PML, and prediagnosis (M3) of diseases associated with gene that include PML. The method is used to identify microsatellite markers, in a disease-related gene, that are associated with a predisposition to
                                                                                          The invention relates to human protease regulatory protein 28.27, the polynucleotide encoding it, the process for preparing the polypeptide by DNA recombinant technology, the application of the polypeptide in treating diseases (e.g. cancer, HIV infection), an antagonist of the polypeptide and its medical function and the application of the polynucleotide. The present sequence is that of a human protease regulatory protein 28.27 PCR primer useful in examples of the invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Typing genes that contain polymorphic microsatellite loci, useful for identifying predisposition to disease, by amplification and determining length of amplicons.
   Polypeptide-human proteinase regulatory protein 28.27 and polynucleotide
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Prion protein polymorphic microsatellite marker consensus sequence #30.
                                                                                                                                                                                                                                                                                                                       Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 disease predisposition; microsatellite marker; prion disease; disease predisposition; malignant hyperthermia syndrome; metabolic disease; milk protein; hormone; transcription factor; pT7-blue-vector; sheep;
                                                                                                                                                                                                                                                                                                                        ö
                                                                                                                                                                                                                                                                              Score 18.2; DB 1; Length 24;
Pred. No. 2.2e+02;
0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                gene typing; polymorphic microsatellite loci; PML;
                                                                                                                                                                                                                                             Sequence 24 BP; 2 A; 7 C; 11 G; 4 T; 0 U; 0 Other;
                                                               Example 2; Page 17 (Disclosure); 33pp; Chinese.
                                                                                                                                                                                                                                                                                                                                                           192 AGGCCCGGGAACGCATGTCCCCC 214
                                                                                                                                                                                                                                                                                                                                                                               23 AGGCCCGGGAACTCCGGTCCCCC 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       χ,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Claim 9; Page 50; 64pp; German.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Han
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ADO81152 standard; DNA; 24 BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          09-AUG-2002; 2002DE-01036711.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               09-AUG-2002; 2002DE-01036711.
                                                                                                                                                                                                                                                                                    .ch 0.4%;
.l Similarity 87.0%;
20; Conservative (
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Preuss S,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      (UYHO-) UNIV HOHENHEIM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         WPI; 2004-215730/21.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 microsatellite; ds.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       DE10236711-A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Geldermann H,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           26-FEB-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    29-JUL-2004
                                  for coding
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Synthetic.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ADO81152;
                                                                                                                                                                                                                                                                                          Query Match
Best Local 3
                                                                                                                                                                                                                                                                                                                                                                                                                                                            RESULT 339
                                                                                                                                                                                                                                                                                                                            Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ADO81152
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               셤
X44X8X800000000X8
                                                                                                                                                                                                                                                                                                                                                                   Š
```

```
ö
                                                                                                                                                                                                            ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    The invention relates to rat receptor tyrosine kinase (KDR) and its corresponding nucleic acid sequence. The nucleic acid molecules of the invention are useful for identifying compounds that modulate wild-type rat KDR activity to evaluate the safety and efficacy of specific inhibitors of KDR in rats. KDR inhibitors are useful for treating cancer, ischaemic ocular diseases such as proliferative retinopathy and inflammation. The present sequence is a reverse transcription (RT) PCR primer used for cloning rat KDR cytosolic domain. This sequence is used in the exemplification of the invention.
diseases and for prediagnosis of such diseases, especially prion diseases but also cystic fibrosis, malignant hyperthermia syndrome in pigs and metabolic diseases; also to type genes that encode milk proteins, hormones or transcription factors. The method is simpler, quicker and particularly less expensive than known methods based on sequencing. This sequence represents a prion protein polymorphic microsatellite marker
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                New nucleic acid molecules encoding rat KDR protein, useful for identifying inhibitors of KDR activity for treating cancer, ischemic ocular diseases, and inflammation.
                                                                                                                                                                                                              Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Rat; receptor tyrogine kinase; KDR; therapy; cancer; ischaemic ocular disease; proliferative retinopathy; inflammation; reverse transcription; RT; PCR; primer; SS.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ;
0
                                                                                                                                                                                                                ;
0
                                                                                                                                                                        ch 0.4%; Score 18.2; DB 1; Length 24; 1 Similarity 87.0%; Pred. No. 2.2e+02; 20; Conservative 0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Length 18;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Sequence 18 BP; 0 A; 0 C; 0 G; 18 T; 0 U; 0 Other;
                                                                                                                                           Sequence 24 BP; 20 A; 4 C; 0 G; 0 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               0.4%; Score 18; DB 1; Le
100.0%; Pred. No. 2.1e+02;
tive 0; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Rat KDR cytosolic domain cloning RT-PCR primer.
                                                                                                                                                                                                                                                  5043 AAAAAAAAAAAAAAAAAAAA 5065
                                                                                                                                                                                                                                                                                   23
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Example 2; Page 30; 77pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     5025 AAAAAAAAAAAAAAA 5042
||||||||||||||||
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        GB;
                                                                                                                                                                                                                                                                          AAAACAAAAACAAAAACAAAAAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Thomas RA, Pan B, Mcgaughey
                                                                                                                                                                                                                                                                                                                                                                        BP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    23-JAN-2004; 2004WO-US001928.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     29-JAN-2003; 2003US-0443335P.
                                                                                                                                                                                                                                                                                                                                                                        ADR32355 standard; DNA; 18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      18; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                             (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       (MERI ) MERCK & CO INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         WPI; 2004-604429/58
                                                                                                                consensus sequence.
                                                                                                                                                                                     Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Rattus norvegicus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     WO2004070004-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      19-AUG-2004.
                                                                                                                                                                                                                                                                                                                                                                                                                                             04-NOV-2004
                                                                                                                                                                                                                                                                                                                                                                                                            ADR32355;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Matches
                                                                                                                                                                                                                                                                                                                                             RESULT 340
                                                                                                                                                                                                                       Matches
                                                                                                                                                                                                                                                                                                                                                         ADR32355,
                                                                                                                                                                                                                                                                                                                                                                                          ò
                8888888888
                                                                                                                                                                                                                                                                                      g
                                                                                                                                                                                                                                                         8
```

8

```
PCR primers AAAG3751-52 were used to amplify a murine cDNA sequence encoding a neutral endopeptidase metallopeptidase (NEP)-like polypeptide, designated NL-1. The specification also describes NL-2 and NL-3. The NL enzymes are used to test for specific inhibitors. The N-terminal region of the enzymes can be used to promote production and secretion of foreign protein and active biopeptides, using chimeric constructs containing the foreign protein adventered from and in phase with the N-terminal region. The NL enzymes are have been localised to the brain, and may be useful in the treatment of neurological diseases such as Alzheimer's disease, pain, and psychiatric disorders. NL enzymes have also been localised to the testis and ovaries, and may be used to control fertility. They have also been localised to bones, and may be used to creat bone diseases, and any be used to treat bone diseases, and any be used to treat bone diseases, and any be used to improper peptide processing by
neurological disease; Alzheimer's disease; pain; psychiatric disorder; fertility; bone disease; abnormal phosphate metabolism; PCR primer; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Novel neutral endopeptidase-like metallopeptidase polypeptides and polynucleotides, used to screen for related sequences and enzyme inhibitors, used for the treatment of NL-3 related bone disorders.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Tail primer #146 from primer set 256 used in gene sorting method
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              sorting, PCR primer, disease diagnosis, disease analysis, differentiation, gene therapy; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Length 22;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Sequence 22 BP; 3 A; 7 C; 8 G; 4 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      0.4%; Score 18; DB 1; Le
100.0%; Pred. No. 2.2e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Disclosure; Page 12; 59pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      0.4%,
100.0%; Pre-
0; }
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1 GGATCCCCCGGGCTGCAG 18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       22
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      BP
                                                                                                                                                                                                                            11-FEB-2000; 2000WO-CA000147.
                                                                                                                                                                                                                                                                                                                                                                       Desgroseillers L, Boileau G;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  23-MAR-2001; 2001WO-US009392.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                30-MAR-2000; 2000US-00538709.
                                                                                                                                                                                                                                                                          99CA-02260376
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          GGATCCCCCGGGCTGCAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ABA10153 standard; DNA; 21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Conservative
                                                                                                                                                                                                                                                                                                                           (UYMO-) UNIV MONTREAL
                                                                                                                                                                                                                                                                                                                                                                                                                           WPI; 2000-549148/50.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Local Similarity
les 18; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             WO200175180-A2.
                                                                                                                         WO200047750-A2
                                                                                                                                                                                                                                                                          11-FEB-1999;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      26-FEB-2002
                                                                                                                                                                          17-AUG-2000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                11-OCT-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Synthetic.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ABA10153;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Query Match
                                                                             Mus sp.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     RESULT 343
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Gene
cell
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ABA10153,
  용
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ઠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               The invention relates to a signal amplification method (MI) for detecting expressed gene using reverse transcription reaction and a self-assembly reaction of forming a self assembly of oligonucleotide probes, thus improving detection sensitivity of the expressed gene in a DNA chip. (MI) is useful for signal amplification method (MI) for detecting expressed gene (claimed). (MI) improves detection sensitivity of the expressed gene in a DNA chip (claimed). (MI) does not require use of expensive enzymes and enables detection corresponding to the original RNA length oxpression amount because of using nither linear amplification nor PCR. This sequence corresponds to a nucleotide used in the method of the
                                                                                                                                                                                                                                                                                                                           signal amplification method; gene expression; reverse transcription;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Signal amplification method for detecting expressed gene, by using reverse transcription reaction and self-assembly reaction of oligonucleotide probes.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Neprilysin; neutral endopeptidase metallopeptidase-like enzyme; NEP-like enzyme; protein production; protein secretion;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Score 18; DB 1; Length 18;
Pred. No. 2.1e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        PCR primer used to amplify cDNA encoding murine NL-1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Sequence 18 BP; 0 A; 0 C; 0 G; 18 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                        Nucleotide #4 for signal amplification method.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          0.4%; Scor.
100.0%; Pred. No. 4.1.
... 0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Disclosure; SEQ ID NO 4; 27pp; Japanese.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     (PALM-) PALMA BEEZ RES INST CO LTD
                                                                                                                                                                                                                                                                                                                                                   self-assembly reaction; DNA chip.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            5025 AAAAAAAAAAAAAAA 5042
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AAAAAAAAAAAAAAA 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AAA63751 standard; DNA; 22 BP.
                                                                                                                       ADR57967 standard; DNA; 18 BP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   14-FEB-2003; 2003JP-00037212.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     13-PEB-2004; 2004WO-JP001588
  18 AAAAAAAAAAAAAAA
                                                                                                                                                                                                                         (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Local Similarity 100.
nes 18; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Usui M, Fujikawa T;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       WPI; 2004-642306/62.
                                                                                                                                                                                                                                                                                                                                                                                                                                                WO2004072302-A1
                                                                                                                                                                                                                                                                                                                                                                                                    Jnidentified.
                                                                                                                                                                                                                         18-NOV-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      04-DEC-2000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    26-AUG-2004.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          18
                                                                                                                                                                          ADR57967;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                RESULT 342
AAA63751
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Matches
                                                                                               ADRS 7967/
XX
AC ADRS 7967/
XX
AC ADRS DT 18-N
XX
KW 881;
XX
KW 88
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              $$$$$$$$$$$$$$
```

ઠ 용

ô

Gaps

Nakamura K;

Okumura K,

Endo F,

(ENDO/) ENDO F.

```
The present invention relates to a method for sorting genes. The method comprises producing first double stranded (ds) CDNA from mRNA by reverse comprises producing first double stranded (ds) CDNA is then digested with a restriction enzyme that generates cohesive ends with overhanging single correction enzyme that generates cohesive ends with overhanging single stranded sequence containing a constant number of nucleotides, and the digestion products are ligated to a set of ds DNA oligonucleotide and adaptor has at one end, a sequence complementary to a cossible overhang and the other end a primer-template sequence specific for the adaptor complementary sequence, and between these two ends the amplified in separate PCR says, using for each a primer that anneals to polyr and a second primer, from a set that anneals to the CDNA specific polyr and a second primer, from a set that anneals of the CDNA specific copy and a second primer, from a set that anneals of the CDNA specific primer-template sequences. Amplicons are finally sorted into noncredundant conders are primer template sequence and thus primed PCR. The method is useful for producing a collection of non-redundant colly sepacially where the overy expressed-gene transcript in the original sample is represented by the subgroups of genes, analysis and diagnosis of diseases, for studying coll differentiation and in gene therapy. The present sequence was used to illustrate the method of the present invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      .
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Human, salivary gland; stem cell; hSGSC; CD49f-positive; differentiation; liver; pancreas; nestin-positive cell; albumin-positive cell; insulin-positive cell; glucagon-positive cell; organ regeneration; organ transplant; hepatotropic; Pdx-1; reverse transcription-PCR; expression analysis; RT-PCR; primer; ss.
                                                                                                                                                                                                                           Sorting genes into non-redundant groups, useful e.g. for gene isolation, diagnosis and in gene therapy, by amplifying cDNA fragments attached to selective adaptors.
                                                                       Zezin-Sonkin D, Shlomit G;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Query Match

0.4%; Score 17.8; DB 1; Length 21;
Best Local Similarity 90.5%; Pred. No. 2.3e+02;
Matches 19; Conservative 0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Sequence 21 BP; 4 A; 6 C; 6 G; 5 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Human Pdx-1 reverse RT-PCR primer, SEQ ID NO:10.
                                                                            Einat P,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           2851 CCAGAGGATCCTGCCATAGCA 2871
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ccagaddarccrdcrdradca 1
                                                                                                                                                                                                                                                                                                                                                                                                                            Example 2; Fig 13; 67pp; English.
                                                                                     Ulanovsky L, Mugasimangalam R,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ADR32218 standard; DNA; 22 BP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           20-FEB-2004; 2004WO-JP002002.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            20-FEB-2003; 2003JP-00043339
(QBIQ-) QBI ENTERPRISES LTD
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             (first entry)
                                                                                                                                                                     WPI; 2001-626451/72.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          WO2004074465-A1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             18-NOV-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ADR32218;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       RESULT 344
```

ò

(BIOS-) BIOS RES INST INC.

```
The invention relates to an isolated CD49f-positive adult human salivary CC gland stem cell (hSGSC) which is capable of differentiating into cells characteristic of various organs such as the liver or pancreas when cultured in vitro. Specifically, the hSGSCs are capable of cultured in vitro. Specifically, the hSGSCs are capable of specifically constituted and albumin-positive cells, insulinguistive cells produced from MSGSCs; methods of inducing differentiation of hSGSCs into nestin-positive/albumin positive, insulinguistive or glucagon-positive cells by in vitro culture in the presence of a fibroblast growth factor, epithelial cell growth factor and cells produced from method of isolating hSGSCs from human callvary gland and culturing them in the presence of epithelial cell computed and culturing them in the presence of epithelial cell computed the regenerated organs eliminate transplant rejection, as the stem cells used to produce the organs are taken from the patient.

CC primers and and produce the organs are taken from the patient.

CC sequences ADR32209-ADR32230 represent reverse transcription-PCR (RT-PCR) primers used to analyse gene expression in hSGSCs in an example of the
                                                                                                            New isolated human stem cell from a salivary gland, capable of differentiating into a nestin-positive and albumin-positive cell, insulin positive and glucagon-positive cell, for use in the regeneration of
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Rat; cerebellum derived growth factor; CDGF1; screening; binding; modulation; erbB type receptor; identification; indication; risk; proliferation; differentiation; induction; neuron; hyperplasia; stem cell culture; intracerebral graft; alleviation; repair; behavioural defect; nervous system; central; peripheral; nerve; prothesis; damage; entubulation; cell survival; treatment; injury; trauma; ischaemia; ischemia; stroke; infection; disorder; inflammation; envocepenration; disease; Parkinson's; Huntingdon's; amylotrophic lateral sclerosis; sensory; retina; spinocerebellar degeneration; multiple sclerosis; neoplasia; amalignant glioma; meuroectodermal tumour; primer;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       .
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        0.4%; Score 17.8; DB 1; Length 22; 90.5%; Pred. No. 2.38+02; Live 0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Primer for rat cerebellum derived growth factor 1 cDNA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              polymerase chain reaction; PCR; amplification; ss
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sequence 22 BP; 8 A; 3 C; 9 G; 2 T; 0 U; 0 Other;
                                                                                                                                                                                                                                Example 3; SEQ ID NO 10; 28pp; Japanese.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   2902 ATGACAGAGGAAGAGAC 2922
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1 ATGCCAGAGGAAGAGGAGAC 21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      96WO-US014484.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AAT87932 standard; cDNA; 19
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          18-DEC-1997 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Local Similarity 90.5
nes 19; Conservative
                                                                             WPI; 2004-642513/62.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           09-SEP-1996;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         WO9709425-A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                13-MAR-1997.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Synthetic.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AAT87932;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  RESULT 345
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AAT87932
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                g
```

```
Query Match
                  Tritz R,
                                                                                                                                                                                                                                                                                                                                                                                          Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AAH58849/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Homo
 ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                         셤
                                                                                                                                                                                                                                      The present sequence is a primer for the PCR amplification of rat cerebellum derived growth factor 1 (CDGF1) cDNA. CDGF can be used to screen for modulators of CDGF binding to erbs type receptors.

Identification of a modification or mutation in a CDGF gene, or aberrant indicate the risk of unwanted cell proliferation or differentiation. CDGF may be used to induce neuronal differentiation in stem cell culture, and maintain the integrity of a terminally differentiated neuronal cell culture, e.g. useful for intracerebral grafting to alleviate behavioural defects. CDGF may also be used in nerve protheses to repair central and peripheral nerve damage, especially where a crushed or severed axon is chtubred, by a prostheric. CDGF may also be used to enhance neuronal cell survival in the central or peripheral nervous system, to treat cell survival in the central or peripheral nervous system, to treat cell survival in the central or peripheral nervous system injury, e.g. traumatic, chemical or vasal injury and deficits such as ischaemia resulting from stroke, infectious/inflammatory and tumour induced injury, chronic neurodegenerative disease including Parkinson's and Huntingdon's, amylotrophic lateral sclerosis, spinocerebellar degeneration, chronic immunological disease of the nervous system including multiple sclerosis, disearches of the sensory neurons and degenerative diseases of the retina. CDGF may also be used to treat neoplastic or hyperplastic expenses.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Ribozyme; hairpin; hammerhead; gene therapy; vasotropic; restenosis; ss.
                                                                                                                                                             Rat and human cerebellum-derived growth factors - used in the treatment of neuronal injury and proliferative disorders.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            amalignant gliomas, medulloblastomas and neuroectodermal tumours
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        0.3%; Score 17.4; DB 1; Length 19; 94.7%; Pred. No. 2.4e+02; ive 0; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Sequence 19 BP; 5 A; 4 C; 8 G; 2 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       cdk-we-hu ribozyme binding site #162.
                                                                                                                                                                                                               Example; Page 57; 94pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          19 GAATTCGGCACGAGGGAG 37
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1 GAATTCGGCACGAGGCCAG 19
                                             (HARD ) HARVARD COLLEGE.
(STRD ) UNIV LELAND S STANFORD.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AAA83687 standard; DNA; 19 BP
                95US-00525864.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          99WO-US028772.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       98US-0110954P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         04-DEC-2000 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      18; Conservative
                                                                                                                               WPI; 1997-192900/17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       (IMMU-) IMMUSOL INC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Query Match
Best Local Similarity
Matches 18; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        WO200032765-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       04-DEC-1998;
                08-SEP-1995;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        06-DEC-1999;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        08-JUN-2000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AAA83687;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Mammalia.
                                                                                               Chang H;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          RESULT 346
AAA83687/c
g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ò
```

```
Human, ribozyme therapy; hairpin ribozyme; hammerhead ribozyme; recognition site; target; ribozyme binding site; eye disease; vulnerary; proliferative disease; skin disease; psorifasis; diabetic retinopathy; cytokine; inflammation; cell-qycle dependent kinase; cyclin; MMP; matrix metalloproteinase; growth factor; reductase; scarring; cytostatic; antipsoriatic; dermatological; antiseborrheic; antidiabetic; virucide; antisickling; ophthalmological; scratolytic; gene therapy; viral wart; atopic dermatitis; actinic keratosis; squamous cell carcinoma; basal cell carcinoma; seborrheic wart; vitreoretinopathy; scar;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Treating proliferative skin or eye diseases and scarring, using ribozymes that cleave RNA encoding cytokines involved in inflammation, matrix metalloproteinases, growth factors and cell-cycle dependent kinases.
                                                                                                                                                                                                                     The present invention relates to a hairpin or hammerhead ribozyme, designed to cleare RNA encoding a cyclin or cell-cycle dependent kinase other than cell-cycle dependent kinases CDK1, PCNA and Cyclin B1.

Representative examples of ribozyme recognition sites are given in AAA88415 to AAA68797. The ribozyme of the invention is useful for inhibiting restenosis by introduction of the ribozyme into cells. The ribozyme is resistant to endonuclease activity and hence is efficient in
                                                                                    New hairpin and hammerhead ribozyme for inhibiting restenosis, cleaves RNA encoding a cyclin or cell-cycle dependent kinase other than CDK1, PCNA and Cyclin B1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         0.3%; Score 17.4; DB 1; Length 19; 94.7%; Pred. No. 2.4e+02; ive 0; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                               Sequence 19 BP; 7 A; 2 C; 6 G; 4 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Cdk-we-hu ribozyme binding site SEQ ID NO:1273.
Barber JR, Robbins JM;
                                                                                                                                                                             Disclosure; Page 65; 109pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1215 AGATCCTTCAACTCCGCTT 1233
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               19 AGATCCTTCAACTCTGCTT 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     99US-0161532P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        26-OCT-2000; 2000WO-US029500
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                sickle cell retinopathy; ss
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AAH58849 standard; DNA; 19
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Conservative
                                                                                                                                                                                                                                                                                                                                                                                     restenosis treatment
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      WPI; 2001-300427/31.
Welch PJ,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               (IMMU-) IMMUSOL INC.
                                          WPI; 2000-412314/35.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Local Similarity
tes 18; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 WO200130362-A2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     26-OCT-1999;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Bapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       10-SEP-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Robbins JM,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           03-MAY-2001.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Synthetic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AAH58849;
```

Gaps

ö

Indels

;

0; Mismatches

Conservative

18;

Matches

```
Thosyme (1) which cleaves RNA encoding a cytokine involved in inflammation, matrix metalloproteinase (MMP), cyclin, cell-cycle dependent kinase, growth factor or a reductase, or administering a nucleic acid molecule (II) comprising a promoter operably linked to a nucleic acid segment encoding (I). (I) can have antipsoriatic, dermatological, cytostatic, antisebortheic, antisiabetic, antisickling, ophthalmological, vulnerary, krateolytic and virucide activities, and cleaves RNA encoding cytokine involved in inflammation. (I) can be used in gene therapy. (I) and (II) are useful for treating proliferative skin diseases such as psoriasis, atopic dermatitis, actinic keratosis, squamous or basal cell carcinoma and viral or seborrheic wart. They can also be used for treating proliferative eye diseases such as diabetic retinopathy, vitreoretinopathy, aickle cell retinopathy of prematurity and retinal detachment, and for treating and preventing prematurity and retinal detachment, and for treating and preventing carring such as keloid, adhesion and hypertrophic or hypertrophic burn scar. AAH57877 to AAH62099 represent sequences used in the cremplification of the present invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           The present invention relates to von Willebrand factor. The present sequence represents a primer used in the methods of the present invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Method for purifying factor VIII using chimera antibody to von Willebrand
                                    The present invention describes a method for treating a proliferative skin or eye disease and scarring. The method involves administering a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Kim BJ;
                                                                                                                                                                                                                                                                                                                                                                                                                           Best Local Similarity 94.7%; Pred. No. 2.46+02; Matches 18; Conservative 0; Mismatcher.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Primer #24 in invention relating to von Willebrand factor
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Lee JM,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sequence 20 BP; 1 A; 10 C; 6 G; 3 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                           Sequence 19 BP; 7 A; 2 C; 6 G; 4 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               oh HG,
Example 1; Page 164; 408pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Lee JS,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Von Willebrand factor; primer; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1215 AGATCCTTCAACTCCGCTT 1233
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Disclosure; Page 4; 12pp; Korean.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        (GREC ) KOREA GREEN CROSS CORP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AAS14499 standard; DNA; 20 BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AGATCCTTCAACTCTGCTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   98KR-00002265
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    98KR-00002265
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Byun TH,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         06-JUN-2002 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  WPI; 2000-547436/50.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Kim JS,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Unidentified
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     KR99066382-A
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 24-JAN-1998;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    24-JAN-1998;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              16-AUG-1999
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          13
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AAS14499;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Kim HC,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          factor
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                RESULT 348
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AAS14499/
ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      셤
```

Score 17.4; DB 1; Length 20; Pred. No. 2.4e+02;

0.3%;

Query Match Best Local Similarity

```
ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             The invention relates to a novel antisense compound targeted to a nucleic acid molecule encoding human apolipoprotein B (ApoB) which specifically hybridises with and inhibits the expression of human apolipoprotein B. The compound of the invention demonstrates antiarteriosclerotic, cardiant, antidiabetic and anorectic activities and may be useful for preparing a composition for treating abnormal lipid or cholesterol metabolism, atherosclerosis, diabetes Type 2, obesity, hyperlipidaemia or cardiovascular disease. Furthermore, the compound has gene therapy applications. The current sequence is that of the 2.0-omethoxytehyl (2.90) Phosphorothicates antisense oligo of the invention which has 2.00 Wings', a phosphorothicates backbone throughout and in which all cytidine residues
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            New antisense compound, useful for preparing a composition for treating abnormal lipid or cholesterol metabolism, atherosclerosis, diabetes Type 2, obesity, hyperlipidemia or cardiovascular disease.
                                                                                                                                                                                                                                                                    apolipoprotein B; ApoB; antiarteriosclerotic; cardiant; antidiabetic; anorectic; lipid; cholesterol metabolism; atherosclerosis; diabetes Type 2; obesity; hyperlipidaemia; cardiovascular; gene therapy; antisense; 2'-O-methoxyethyl gapmer; phosphorothioate backbone; 2'-MOB;
                                                                                                                                                                                                                                   2'-MOE gapmer antisense oligo targeted to rabbit ApoB DNA - SEQ ID 850.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           0.3%; Score 17.4; DB 1; Length 20; 94.7%; Pred. No. 2.4e+02; ive 0; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Sequence 20 BP; 10 A; 1 C; 7 G; 2 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Claim 1; SEQ ID NO 850; 405pp; English
5063 AACTCGAGGGGGGCCCGG 5081
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   2903 TGACAGAGGAAGAGA 2921
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        20 Accreaagagagacceg
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AD033402 standard; DNA; 20 BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        15-MAY-2003; 2003WO-US015493.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           15-MAY-2002; 2002US-00147196.
13-NOV-2002; 2002US-0426324P.
                                                                                                                         ADH18861 standard; DNA; 20
                                                                                                                                                                                               11-MAR-2004 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                (ISIS-) ISIS PHARM INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Graham MJ;
                                                                                                                                                                                                                                                                                                                                                                                Oryctolagus cuniculus.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      are 5-methylcytidines.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      WPI; 2004-022840/02.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Query Match
Best Local Similarity
Matches 18; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                    WO2003097662-A1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                      27-NOV-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Crooke RM,
                                                                                                                                                                                                                                                                                                                                              human; ss
                                                                                                                                                             ADH18861;
                                                                                       RESULT 349
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          RESULT 350
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ADO33402
ID ADO3
                                                                                                        ADH1886
                                                                                                                                          g
ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   à
```

Gape

```
Example 42; SEQ ID NO 850; 483pp; English.
                                                                     phosphorothioate backbone; rabbit; ss
                                                                                      Location/Qualifiers
                                                                                                                                       13-NOV-2003; 2003WO-US036411.
                                                                                                                                               13-NOV-2002; 2002US-0426234P.15-MAY-2003; 2003WO-US015493.
            (first entry)
                                                                                                                                                                                                                                                                                                       cargeted to rabbit ApoB
                                                                                          ...20
                                                                                                                                                           (ISIS-) ISIS PHARM INC
                                                                             Oryctolagus cuniculus
                                                                                                                                                                    Graham M,
                                                                                                                                                                            WPI; 2004-420321/39.
                                                                                                                      WO200404181-A2.
                                                                                          modified base
            12-AUG-2004
                                                                                                                               27-MAY-2004
                                                                                                                                                                    Crooke R,
    ADO33402;
                                                                                                                                                                                                 syndrome
```

```
The present sequence is that of a single mismatch target sequence for a molecular beacon comprising an oligonucleotide probe (see ABL57069) covalently attended at the 3' end to fluorescent dye and at the 5' end to a nanoparticle. In the native state, the probe forms a hairpin conformation with hybridised termini. The probe forms a hairpin and quencher (gold nanoparticle) in the molecular beacon results in little or no detectable fluorescence. Upon hybridisation of the central complementary stretch of the probe to a target sequence, such as the present sequence, the hairpin undergoes a conformational change resulting in an increase in fluorescence, the extent of which is proportional to the amount of target sequence, the extent of which is proportional to the amount of target sequence present. Experiments with the present sequence and a perfectly-matched target (see ABL57071) showed that sequence and a perfectly-matched target (see ABL57071) showed that change the proportion and confirmates generally to the use of metal surface quenchers such as particles or films for high sensitivity applications in, for example, detection and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Molecular beacon; fluorophore; nanoparticle; nucleic acid detection; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Sensitively detecting proximity changes in a system that utilizes an interacting fluorophore and quencher, for high sensitivity applications, involves utilizing a metal surface as quencher.
                                                       0.3%; Score 17.4; DB 1; Length 20;
14.7%; Pred. No. 2.4e+02;
ve 0; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         0.3%; Score 17.4; DB 1; Length 21; 94.7%; Pred. No. 2.4e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Molecular beacon target sequence (single mismatch).
Sequence 20 BP; 10 A; 1 C; 7 G; 2 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Seguence 21 BP; 14 A; 4 C; 2 G; 1 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 /*tag= a
/note= "mismatch site"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Libchaber A;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Example 3; Page 62; 62pp; English.
                                                                                                                                                                                     2903 TGACAGAGGAAGAGAAGA 2921
                                                                                                                                                                                                                                                1 TGACAGATGAAGAGA 19
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       29-AUG-2001; 2001WO-US041941.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  29-AUG-2000; 2000US-0228728P.
30-MAR-2001; 2001US-0280350P.
                                                 Query Match
Best Local Similarity 94.7%;
Matches 18; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                           ABL57072 standard; DNA; 21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        22-JUL-2002 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 (UYRQ ) UNIV ROCKEFELLER
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Dubertret B, Calame M,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           WPI; 2002-404569/43.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  diagnostic systems
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             WO200218951-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            misc_feature
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        07-MAR-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Synthetic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ABL57072;
                                                                                                                                                                                                                                                                                                                                               RESULT 351
                                                                                                                                                                                        ò
                                                                                                                                                                                                                                             셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         The invention relates to a novel antisense compound where the compound hybridises to and inhibite expression of mRNA encoding human apolipoprotein B (App8) after 16-24 hours by at least 30% in 80% confluent HepG2 cells in culture at a concentration of 150 nM. The compound of the invention demonstrates cardiovascular, antistabetic, anorectic, cardiant, cancertoric antistabetic, anorectic, cardiant, cancertoric, hypotensive, anabolic, eating disorder-related, cytostatic, anotropic, hypotensive, anabolic, eating disorder-related, cytostatic, cancertorine, vasotropic, neuroprotective and nootropic activities and may condocrine, vasotropic, intubiting the expression of apolipoprotein B in cells or tissues in vivo in order to address a condition associated with abnormal condocrating inhibiting the expression of apolipoprotein B in cells or tissues in vivo in order to address a condition associated with abnormal concentration and chylomicrons and thus may be utilised during treatment of cholesterol levels, lipid levels, fatty acid levels, acute phase cholesterol levels, lipid levels, hypertholesterolesmand, cardiovascular disorders, Von Gierke's disease, lipodystrophy, cardiovascular disorders, Von Gierke's disease, lipodystrophy, cardiovascular disorders, Von Gierke's disease, lipodystrophy, cardiovascular disease, althemer's disease, dementia, impotence, obstructive liver disease, Alzheimer's disease, dementia, cimpotence, obstructive liver disease, Alzheimer's disease, dementia, cardiers of the invention which is
                                                                                                                                                                       apolipoprotein B; ApoB; cardiovascular; antiarteriosclerotic; antidiabetic; anorectic; cardiant; vasotropic; hypotensive; antidiabetic; anorectic; cardiant; vasotropic; hypotensive; anabolic; eating disorder; cytostatic; endocrine; vasotropic; hypotensive; neuroprotective; nootropic; lipid; cholesterol metabolism; hyperlipoproteinaemia; hyperlipidaemia; hypercholesterolaemia; hyperlipoproteinaemia; hyperlipidaemia; hypercholesterolaemia; sexual ateliotic dawrfism; hyperthyroidism; hypertension; anorexia nervosa; Werner's syndrome; hepatoma; multiple myeloma; uraemia; impotence; obstructive liver disease; Alzheimer's; dementia; diabetes; obesity; atherosclerosis; antisense; 2'-MOE gapmer; 2'-methoxyethyl wing;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          /note = "OTHER = Phosphorothioate backbone, bases 1-5
16-20 2'-MOE wing bases, all cytidine residues are 5-
methylcytidines"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Antisense oligonucleotide compound that inhibits expression of mRNA encoding human apolipoprotein B, useful for treating hyperlipidemia, diabetes, obesity, von Gierke's disease, lipodystrophies, Cushing's
                                                                                                                      Antisense 2'-MOE gapmer oligo targeted to rabbit ApoB - SEQ 850
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Dobie KW;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Lemonidis-Tarbet K,
```

Matches

ઠે a

```
The DNA primer is used with primers AAQ92370-77 in the reverse transcription-polymerase chain amplification of alpha- lactalbumin from MA104 cells and topoisomerase-IIa from Jurkat cells. Amplification is carried out using DNA-polymerase Ifil from Thermus fillformis (AAR76060) (Updated on 25-MAR-2003 to correct PN field.)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    New heat-stable DNA polymerase from Thermus filiformis - has reverse transcriptase activity in the presence of magnesium ions.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Human; FD23; cytostatic; haemostatic; virucide; immunomodulatory; antiinflammatory; malignant tumour; haemopathy; HIV infection; immunological disease; inflammatory condition; PCR primer; ss.
                                                                                                                                                                                                         DNA-polymerase; Tfil; thermostable enzyme; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  0.3%; Score 17.4; DB 1; Length 2. 94.7%; Pred. No. 2.5e+02; attive 0; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Sequence 23 BP; 5 A; 4 C; 4 G; 10 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               PCR primer specific for cDNA encoding human FD23.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Reeves RA,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Disclosure; Page 11; 40pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Gibbs MD,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       3450 TAAGCAGATGATGGAAAT 3468
                                                                                                                                                                                                                                                                                                                                                                                                                                                      (PACI-) PACIFIC ENZYMES 1993 LTD.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 19 TAAGCAGATCATGGAAAAT 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 BP.
                                                                                                                                                                                                                                                                                                                                                                                                                  93NZ-00250288.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 20-NOV-2000; 2000WO-CN000468
                                                                                                                                                                                                                                                                                                                                                                        94WO-NZ000135.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AAH45480 standard; DNA; 23
                               AAQ92371 standard; DNA; 23
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 (first entry)
                                                                                                                                   (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Day DJ,
                                                                                                              (revised)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    WPI; 1995-206929/27.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Local Similarity
es 18; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      WO200138525-A1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Bergquist PL,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 07-SEP-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                    25-NOV-1993;
                                                                                                                                                                                                                                                                                                                                                                            23-NOV-1994;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        31-MAY-2001.
                                                                                                            25-MAR-2003
28-OCT-1995
                                                                                                                                                                                                                                                                                             WO9514770-A1
                                                                                                                                                                                                                                                                                                                                    01-JUN-1995.
                                                                                                                                                                                                                 DNA primer;
                                                                                                                                                                           DNA primer
                                                                                                                                                                                                                                                       Synthetic.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AAH45480;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Query Match
                                                                          AAQ92371;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               RESULT 354
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AAH45480,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           The invention relates to the use of acylated aminopropane diols and their analogue (I), their optical and geometric isomers, racemates, salts, and mixtures in pharmaceutical compositions for the treatment of pathological states in which there is lipid or carbohydrate metabolism disturbance, inflammation, and/or cell differentiation or proliferation disturbance. The compounds are useful for the treatment of lipid and carbohydrate metabolism disorders such as syndrome X, diabetes, atherosclerosis and obesity, inflammatory disorders such as atherosclerosis, allergies, asthma, eczema, psoriasis, and itching, and cell proliferation and differentiation disorders such as carcinogenesis. In an example of the invention, the effectiveness of the compounds to activate peroxisome proliferator-activated receptor (PPAR) genes was tested by gene analysis using PCR. This sequence represents a primer used in the PCR analysis.
ö
                                                                                                                                                                                                                                                                                                                                  anorectic; analgesic; antianginal; antidiabetic; antiarteriosclerotic; anorectic; antiallergic; antiasthmatic; dermatological; antipsoriatic; cytostatic; peroxisome proliferator-activated receptor activator; acylated aminopropane diol; lipid metabolism disorder; carbohydrate metabolism disturbance; inflammation; cell differentiation; proliferation; syndrome X; diabetes; atherosclerosis; obesity; atherosclerosis; allergy; asthma; eczema; psoriasis; itching; carcinogenesis; PPAR; gene analysis; PCR primer.
                                                                                                                                                                                                                                                                                                Acetylated aminopropane diol activated PPAR gene analysis PCR primer #1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Use of acylated aminopropane diols and their analogs, for the treatment of lipid and carbohydrate metabolism disorders, inflammatory disorders and cell proliferation and differentiation disorders.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Gaps
Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ..
0
ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           0.3%; Score 17.4; DB 1; Length 22;
llarity 94.7%; Pred. No. 2.5e+02;
Conservative 0; Mismatches 1; Indels
Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Sequence 22 BP; 5 A; 7 C; 5 G; 5 T; 0 U; 0 Other;
7
  0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Example 18; Page 70; 113pp; French
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  4464 AGTIGICCAGGAAATICAG 4482
                                          5050 AAAAAAAAAAAAAAACTCG 5068
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        21 AGTIGICCAGGAGATICAG 3
                                                                                2 AAAAAAACAAAAAAACTCG 20
                                                                                                                                                                                    BP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         12-FEB-2003; 2003FR-00001689.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     12-FEB-2003; 2003FR-00001689
                                                                                                                                                                                 ADR42646 standard; DNA; 22
                                                                                                                                                                                                                                                                (first entry)
    Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             WPI; 2004-583504/57.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Best Local Similarity
Matches 18; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   (GENF-) GENFIT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        FR2850869-A1.
                                                                                                                                                                                                                                                                04-NOV-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            13-AUG-2004
      18;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Query Match
                                                                                                                                                                                                                            ADR42646;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Najib J;
```

ઠે

ö

Gaps

.; 0

Length 23;

S Saul

```
including autoimmune diseases, degenerative nervous system diseases, graft versus host diseases, hypersensitivity diseases, infectious diseases and neoplastic diseases. Autoimmune diseases include Addison's diseases, atrophic gastritis. Degenerative nervous system diseases include multiple sclerosis and Alzheimer's disease. Hypersensitivity diseases include multiple sclerosis and Alzheimer's disease. Hypersensitivity diseases include Type I hypersensitivities such as contact with allergens that lead to allergies. Type II hypersensitivities used as those present in Goodpasture's syndrome and Type IV hypersensitivities such as those manifested in leprosy. Infectious diseases include viral infections caused by viruses such as HIV, fungal infections such as those caused by schistosomes, filaria and bacterial infections such as those caused by wordpacterium. Neoplastic diseases include lymphoproliferative diseases
                                              Kit for diagnozing and treating T-cell associated diseases e.g. autoimmune, degenerative nervous system and infectious disease, comprises nucleic acid primers specifically priming and allowing amplification of a Vbeta gene.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        breast. The present sequence represents a Vbeta gene repeat sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Novel nucleic acid obtained from 4 synthesis-period of neuroblastoma cells useful for prognosing and determining progress stage of
                                                                                                                                                                                                                                           The invention relates to a kit for diagnosing and treating T-cell associated diseases which comprises a panel of nucleic acid primers specifically priming and allowing amplification of each Vbeta gene, VbetaRNA or CDNA. The kit is useful for diagnosing organ transplant rejection and diagnosing and treating T-cell associated diseases
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               4 synthesis-period of neuroblastoma related primer, SEQ ID 324.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Human; 4 synthesis-period; neuroblastoma; stage 4S; primer; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 such as cancer of
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Score 17.2; DB 1; Length 22;
Pred. No. 2.6e+02;
0; Mismatches 3; Indele
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Sequence 22 BP; 18 A; 4 C; 0 G; 0 T; 0 U; 0 Other;
                                                                                                                                                                                                Disclosure; SEQ ID NO 808; 164pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 such as leukaemias, lymphomas and cancers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         5065
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1 AAAACAAAACAAAACAAAAC 22
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         5044 AAAAAAAAAAAAAAAAAAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            (HISM ) HISAMITSU PHARM CO LTD.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       0.3%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                30-OCT-2003; 2003WO-JP013932.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           30-OCT-2002; 2002JP-00316586.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ADO16062 standard; DNA; 22
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Query Match
Best Local Similarity 86.43
Matches 19, Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 29-JUL-2004 (first entry
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        (CHIB-) CHIBA PREFECTURE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Ohira M;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         WPI; 2004-390323/36.
                            WPI; 2004-059052/06.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              WO2004039975-A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Nakagawara A,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               13-MAY-2004.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Synthetic.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ADO16062;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 RESULT 356
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ADO16062
ID ADO1
  g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ઠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ö
                                                                                                                                                                                                                                                                                                                                       This invention relates to the human FD23 protein and the CDNA sequence encoding it. Included in the invention is a vector containing a FD23 encoding polynucleotide, a host cell containing the vector, and an antibody directed against FD23. Both the FD23 protein, and CDNA encoding it can cause cytostatic, haemostatic, virucide, immunomodulatory or antificity, when used in the diagnosis and treatment of malignant tumours, haemospathy, HIV infection, immunological disease and various inflammatory conditions. The present sequence represents a PCR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               human; T-cell associated disease; Vbeta; autoimmune disease; degenerative nervous system disease; graft versus host disease; hypersensitivity disease; infectious disease; neoplastic disease; Addison's disease; atrophic gastritis; degenerative nervous system disease; multiple sclerosis; Alzheimer's disease; hypersensitivity; disease; type I hypersensitivity; doodpasture's syndrome; type II hypersensitivity; doodpasture's syndrome; type IV hypersensitivity; leprosy; infectious disease; viral infection; HIV; fungal infection; Mycobacterium; neoplastic disease; limitedian; Mycobacterium; neoplastic disease; lymphoproliferative disease; leukaemia; lymphoma; cancer; brain cancer;
                                                                                                                                                                                             Human FD 23 and encoded polynucleotide, used in diagnosis and treatment of malignant tumors, hemopathy, human immunodeficiency virus infection, immunological diseases and inflammation.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      0.3%; Score 17.4; DB 1; Length 23; 94.7%; Pred. No. 2.5e+02; ive 0; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Sequence 23 BP; 2 A; 12 C; 7 G; 2 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               primer specific for cDNA encoding human FD23
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Human Vbeta gene repeat sequence #404.
                                              (BIOR-) BIOROAD GENE DEV LTD SHANGHAI.
                                                                                                                                                                                                                                                                                              Example 2; Page 12; 31pp; Chinese.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             5063 AACTCGAGGGGGGCCCGG 5081
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         20 ACCTCGAGGGGGGCCCGG 2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ADH70614 standard; DNA; 22 BP
99CN-00124048.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              99US-00263959
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            94US-00309335
95US-00531241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     25-MAR-2004 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Matches 18; Conservative
                                                                                                                                               WPI; 2001-355933/37.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Hood LE, Rowen L;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    L
E
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              breast cancer; ds
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              (ROWE/) ROWEN L.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          US2002150891-A1.
                                                                                                 Xie Y;
22-NOV-1999;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              05-MAR-1999;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            19-SEP-1994;
19-SEP-1995;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ноор/) ноор
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              17-OCT-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ADH70614;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Query Match
                                                                                              мао У,
```

RESULT 355 ADH70614

ઠે 윱 Homo

ö

Gapa

ó

the brain,

; 0

Claim 8; SEQ ID NO 324; 455pp; Japanese.

neuroblastomas.

```
Analyzing a target nucleic acid sequence in a biological material by real time PCR using nucleic acid primers that are separated by at least 750 nucleic acid residues in the target sequence.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   The invention relates to a novel method for analysing a target nucleic acid sequence in a biological material. The method comprises adding at least two nucleic acid primers that hybridise under stringent conditions to predetermined nucleic acid sequences of the target nucleic acid sequence that are separated by at least 750 nucleic acid residues, amplifying the target nucleic acid sequence by PCR, and detecting and quantifying the target nucleic acid sequence. The methods and compositions of the present invention are useful for analysing a target nucleic acid sequence in a biological material by real time PCR using nucleic acid primers that are separated by at least 750 nucleic acid residues in the target sequence. This polynucleocide sequence represents
                                                  The present invention relates to human nucleic acid sequences (1; ADO15739-ADO15912) obtained from 4 synthesis-period (stage 4S) of neuroblastoma cell. (I) is useful for prognosing and determining the progress stage of 4 synthesis-period of neuroblastoma. The present sequence is a primer, used to illustrate the invention.
                                                                                                                                                                                                                                     Gaps
                                                                                                                                                                                                                                     ö
                                                                                                                                                                                              0.3%; Score 17.2; DB 1; Length 22;
86.4%; Pred. No. 2.6e+02;
iive 0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       et sequence. This polynucleotide sexemplification of the invention.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Armistead D;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Sequence 22 BP; 6 A; 7 C; 3 G; 6 T; 0 U; 0 Other;
                                                                                                                                                                 Sequence 22 BP; 3 A; 6 C; 4 G; 9 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Hepatitis B virus real time PCR primer, SEQ ID
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        analysis; target; real time PCR; primer; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Disclosure; SEQ ID NO 33; 96pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Gillmeister L, Marlowe K,
                                                                                                                                                                                                                                                                          3990 GGGCCTCATCACTTCCTTTGCT 4011
                                                                                                                                                                                                                                                                                           1 GGTCATCATCAGTTCCTTTGCT 22
                                                                                                                                                                                                                                                                                                                                                                                                   BP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  10-FEB-2004; 2004WO-US002012.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   10-FEB-2003; 2003US-00361004
                                                                                                                                                                                                                                                                                                                                                                                                 ADR32106 standard; DNA; 22
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         (first entry)
                                                                                                                                                                                                          Query Match
Best Local Similarity 86.4
Matches 19; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          a primer used in the
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    (CLEA-) CLEARANT INC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         WPI; 2004-625843/60.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Hepatitis B virus.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 WO2004072230-A2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Mckenney K,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        18-NOV-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  26-AUG-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                      ADR32106;
                                                                                                                                                                                                                                                                                                                                                                                    ADR32106/
                                                                                                                                                                                                                                                                                                                                                                                                                     ₽
                                                                                                                                                                                                                                                                                                                쉱
```

ö

Gaps

ö

0.3%; Score 17.2; DB 1; Length 22; 86.4%; Pred. No. 2.6e+02; atrive 0; Mismatches 3; Indels

Conservative

Local Similarity les 19; Conserv

Matches

Query Match

```
The invention relates to a method of determining (MI) level of potentially active blological pathogens in biological material, involves optentially active blological pathogens in biological material, involves camplifying target nucleic acid primare pairs to biological material, amplifying target nucleic acid sequences by PCR, and detecting and amplifying target nucleic acid sequences by PCR, and detecting and amplifying target nucleic acid sequences by PCR, and detecting and and sequences is proportional to number of biological pathogens in a biological material such as cells, biological material ablod or blood components, proteins, enzymes, immunoglobulins, tissues, blood or blood components, proteins, enzymes, immunoglobulins, tissues, blood or blood components, proteins, enzymes, immunoglobulins, botanicals, contains cells, cells, cartilage, corneas, arteries, veins, organs, contains cells, cells, cartilage, corneas, arteries, veins, organs, compose, collagen, chitin and its derivatives, forensic samples, munmified material, human or animal remains, stem cells, islet of inangerhans cells, cells for transplantation, red blood cells, white collocatels or platelets. The bological pathogen is chosen from Aspergillus, Candida, Histoplasma, and single cell parasites. The blological pathogen is chosen from Aspergillus, Candida, Histoplasma, Salmonella, Carteromoreer, Corresponenter, ilsteria, clostridium, Streptococcus, Staphylococcus, Serratia, Enrechaecter, Salmonella, Proteological pathogen is chosen from Adeno-associated virus (HAV), Hepatitis Virus, Hepatitis Envirus, Paramity, Hepatitis Envirus, Material Envirus, Hepatitis Envirus, Material 
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Determining level of potentially active biological pathogens in biological material, by adding nucleic acid primer pairs to biological material, amplifying target nucleic acid by PCR, detecting and quantifying target nucleic acid.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ä
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Marlowe K, Armistead
                                                                                                                                                                                                                                                                       Hepatitis B virus DNA detection primer #12.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Disclosure; SEQ ID NO 33; 111pp; English.
723 GAAGGITITIGCAAITCAGGAT 744
                           22 GAAGGAGTTTGCCATTCAGGAT
                                                                                                                                                                                                                                                                                                                        ss; detection; pathogen; primer
                                                                                                                                                  BP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           10-FEB-2004; 2004WO-US002013.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   10-FEB-2003; 2003US-00361002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Mckenney K, Gillmeister L,
                                                                                                                                                    ADR67796 standard; DNA; 22
                                                                                                                                                                                                                                     (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                (CLEA-) CLEARANT INC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 WPI; 2004-625844/60.
                                                                                                                                                                                                                                                                                                                                                               Hepatitis B virus.
                                                                                                                                                                                                                                                                                                                                                                                                            WO2004072231-A2
                                                                                                                                                                                                                                       18-NOV-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                       26-AUG-2004
                                                                                                                                                                                             ADR67796;
                                                                                                              RESULT 358
                                                                                                                                    ADR67796,
                                                                                                                                                         g
```

Sequence 17 BP; 5 A; 4 C; 6 G; 2 T; 0 U; 0 Other;

```
Barr virus (EBV), Hepatitis B virus (HBV), Herpes simplex virus 1, Herpes simplex virus 2, Molluscum contagiosum, Papilloma virus (HPV), Smallpox virus (variola), Vaccinita virus, Venezuelan equine encephalitis virus (VEEV), Ebola virus, Wast Nile virus, Venezuelan equine encephalitis virus (MESV), Ebola virus, West Nile virus, Human Parvovirus B19 and Rotavirus. (MI) is useful for determining the effectiveness of a sterilization photose applied to a biological material. (MI) is useful in determining whether the biological pathogen is inactive or active. (MI) enables a biological pathogen is inactive or active. (MI) enables and whether the biological pathogen is inactive or active. (MI) enables and whether the biological pathogen is inactive or active. (MI) enables evaluation of the effectiveness of sterilization processes, and determination of both the original level and the residual level of potentially active biological pathogens. This sequence corresponds to a per primer to detect the hepatitis B virus DNA by the method of the
```

Query Match 0.3%; Score 17.2; DB 1; Length 22; Best Local Similarity 86.4%; Pred. No. 2.6e+02; Matches 19; Conservative 0; Mismatches 3; Indels Sequence 22 BP; 6 A; 7 C; 3 G; 6 T; 0 U; 0 Other; 723 GAAGGTTTTGCAATTCAGGAT 744

ö

Gaps

ö

22 GAAGGAGTTTGCCATTCAGGAT 1 윱

ઠ

AAT66995 standard; DNA; 17 BP. 05-AUG-1997 (first entry) AAT66995; RESULT 359 **AAT66995** 

Vector-specific primer SK-Zap

Mch3; cysteine protease; apoptosis; AIDS; ischaemia; neurodegenerative disease; gene therapy; diagnosis; PCR; polymerase chain reaction; primer; ss.

Synthetic.

WO9718313-A1.

22-MAY-1997

96WO-US018118. 95US-00556627. 12-NOV-1996; 13-NOV-1995; (IDUN-) IDUN PHARM INC. (UYJE-) UNIV JEFFERSON THOMAS.

Fernandes-Alnemri T, Litwack G, Armstrong R; Alnemri ES, Tomaselli K;

WPI; 1997-289289/26.

New gene encoding Mch3, a cysteine protease that regulates apoptosis - for treating human diseases associated with apoptosis, and screening for antagonists and agonists of Mch3.

Example 1; Page 26; 52pp; English.

Vector-specific primer SK-Zap (T66995) was used with primer T50-prl (T66994), based on a GenBank sequence expressed sequence tag, to amplify cDNA from a human Jarkat library. A Ced3-interleukin-1- beta converting enzyme (ICB)-11ke partial cDNA clone was identified. This was used to rescreen the library, leading to the isolation of cDNA clones (T66992-93) for novel apoptotic cysteine protease Mch3-alpha (W15262) and Mch3-beta (W15263)

```
õ
                                                                                                                                                                                                               Mch4; Mch5; aspartic acid specific Cys protease; cell apoptosis; stroke; increased cell survival; hormone dependent tumour; autoimmune disease; immunoglobulin mediated glomerulonephritis; degenerative disease; therapy; PCR primer; amplify; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Aspartic acid specific cysteine protease(s) Mch4 and Mch5 - which are involved in cell apoptosis, useful to diagnose and treat, e.g. cancer, autoimmune, Alzheimer's or Parkinson's disease.
                         Gaps
                         ö
                                                                                                                                                                                                                                                                                                                                                                                                                                 Fernandesalnemri T, Litwack G, Armstrong R;
   Score 17; DB 1; Length 17; Pred. No. 2.5e+02;
                         0; Indels
                                                                                                                                                                                             Primer SK-Zap for Mch4 and Mch5 coding sequences.
   0.3%; Score 17; DB 100.0%; Pred. No. 2.5 ative 0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Example 1; Page 30; 76pp; English.
                                                         1 CAGGAATTCGGCACGAG 17
                                                                                                                                                                                                                                                                                                                                                                                                 (IDUN-) IDUN PHARM INC.
(UYJE-) UNIV JEFFERSON THOMAS
                                            16 CAGGAATTCGGCACGAG 32
                                                                                                                     AAT90091 standard; DNA; 17 BP
                                                                                                                                                                                                                                                                                                                                                                   96US-00618408.
96US-00665220.
                                                                                                                                                                                                                                                                                                                                               97WO-US004330.
                                                                                                                                                                         (first entry)
O.5.
Best Local Similarity 100.
Matches 17; Conservative
                                                                                                                                                               (revised)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 WPI; 1997-480225/44.
                                                                                                                                                                                                                                                                                  Homo sapiens.
                                                                                                                                                                                                                                                                                                                                               19-MAR-1997;
                                                                                                                                                                                                                                                                                                     WO9735020-A1
                                                                                                                                                                                                                                                                                                                                                                   19-MAR-1996;
14-JUN-1996;
                                                                                                                                                                                                                                                                                                                                                                                                                                Alnemri ES,
Tomaselli K;
                                                                                                                                                             25-MAR-2003
09-APR-1998
                                                                                                                                                                                                                                                                                                                          25-SEP-1997.
                                                                                                                                                                                                                                                                      Synthetic.
                                                                                                                                          AAT90091;
                                                                                                RESULT 360
                                                                                                         AAT90091
                                                                 g
                                                                                                                      ઠ
```

This sequence represents a primer for the Mch4 and Mch5 genes of the invention. Mch4 (see AAW23790) and Mch5 (see AAW27391) are members of the Aspartic acid specific Cys protease family involved in cell apoptosis. The genes and proteins can be to diagnose, treat or reduce the severity of diseases resulting from increased cell survival, e.g. hormone dependent tumours such as breast, prostate or ovarian cancers, or autoimmune diseases, such as systemic lupus erythematosus or immunoglobulin mediated glomerulonephritis, diseases resulting from decreased cell survival, e.g. degenerative diseases such as Alzheimer's or Parkinson's disease, or amyotrophic lateral sclerosis or other diseases associated with increased apoptosis such as aplastic anaemia, stroke, ischaemic injury following myocardial infarction or reperfusion injury. (Updated on 25-MAR-2003 to correct PI field.) ö Сарв ö 0.3%; Score 17; DB 1; Length 17; 100.0%; Pred. No. 2.5e+02; ive 0; Mismatches 0; Indels Sequence 17 BP; 5 A; 4 C; 6 G; 2 T; 0 U; 0 Other; 100.08; Query Match
Best Local Similarity 100.1
Matches 17; Conservative

ઠે d

```
The present PCR primer was used to amplify Mch6 cDNA. Mch6 is a ced-3 chomologue, and is a member of the ICE (interleukin-1-beta converting coryme) family of aspartate-specific cysteine proteases (ASCPS). The enzyme) family of aspartate-specific cysteine proteases (ASCPS). The cypedification describes a method for identifying mammalian Mch6 activity modulators (inhibitors or enhancers). The compounds identified by the compounds and hard so lateral solar solar seases characterized by increased apoptotic cell death such as Alzheimer's pigmentosa, or cerebellar degeneration, myelodysplastic syndromes such as plastic anemia, ischemic injury including myocardial infaction, stroke compounds are also useful for treating comportate and ovarian cancer. Increased cell survival or apoptosis cypostete and ovarian cancer. Increased cell survival or apoptosis cypostete and ovarian cancer. Increased cell survival or apoptosis inhibition also results in autoimmune diseases such as systemic lupus confering and immune-mediated glomerulonephritis as well as viral identified compounds are useful for treating these conditions. The Mch6 inhibitors are used to treat or to reduce severity of diseases
                                                                                                                                                                                                                                                                                                      Mch6; ced-3 homologue; ICE; interleukin-1-beta converting enzyme; aspartate-specific cysteine protease; ASCP; apoptotic cell death; Alzheimer's disease; Parkinson's disease; amyotropic lateral sollerosis; retinitis pigmentosa, cerebellar degeneration; myelodysplastic syndrome; aplastic anemia; ischemic injury; myocardial infarction; stroke; cancer; reperfusion injury; autoimmune disease; systemic lupus erythematosus; immune-mediated glomerulonephritis; viral infection; cell death;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Identifying mammalian homolog ced-3 homolog (Mch)6 activity modulators, useful for treating lymphomas, carcinomas and hormone dependent tumors, Alzheimer's disease, Parkinson's disease, comprises using Mch6 polypeptide.
                                                                                                                                                                                                                                                                   PCR primer used to amplify cDNA encoding human Mch6 polypeptide.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Match 0.3%; Score 17; DB 1; Length 17; Local Similarity 100.0%; Pred. No. 2.5e+02; les 17; Conservative 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Sequence 17 BP; 5 A; 4 C; 6 G; 2 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Litwack G;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Fernandes-Alnemri T,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Example 1; Col 12; 36pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         (UYJE-) UNIV JEFFERSON THOMAS
CAGGAATTCGGCACGAG 32
                                     1 caccaarrccccaccac 17
                                                                                                                                               AAH77930 standard; DNA; 17 BP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        99US-00311760.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   97US-00865579
                                                                                                                                                                                                                                   (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           WPI; 2001-540372/60.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       PCR primer; ss
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        US6274318-B1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        13-MAY-1999;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                29-MAY-1997;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  14-AUG-2001.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Alnemri ES,
                                                                                                                                                                                                                                   13-NOV-2001
                                                                                                                                                                                           AAH77930;
  16
                                                                                                         RESULT 361
```

```
The invention relates to an isolated gene encoding MCH6 (mammalian ced-3 chomologue 6) an aspartate-specific cysteine protease and the MCH6 compose to a specific cysteine protease and the MCH6 colypeptide. The MCH6-encoding nucleic acids and polypeptides can be used to dispanse, treat (e.g. by gene therapy) or reduce the severity of cell compose, treat (e.g. by gene therapy) or reduce the severity of cell composes e.g. Alzheimer's disease, Parkinson's disease, amyotrophic diseases e.g. Alzheimer's disease, Parkinson's disease, amyotrophic compelopyplatic syndromes, e.g. aplastic and ememia, ischaemic injury, composardial infarction, stroke and troperfusion injury. The MCH6-encoding concleic acids and polypeptides can also be used to disagnose or generate concleic acids and polypeptides can also be used to disagnose or generate conclidents. A purified recombinant WCH6 protein can be used to measure coll death. A purified recombinant WCH6 protein can be used to measure coll death. A purified recombinant WCH6 protein can be used to measure consistency in the control of a continuous fluorometric assay. The present sequence is a PCR primer control of the control 
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ö
                                                                                                                                                                                                                                                                                                                                                                                            Aspartate-specific cysteine protease; MCH6; ss; nootropic; neuroprotective; anti-Parkinsonian; antianaemic; vasotropic; cardiant; cerebroprotective; mammalian ced-3 homologue 6; gene therapy; apoptosis; Alzhaimer; disease; Parkinson's disease; retinitis pigmentosa; cerebellar degeneration; myelodysplastic syndrome; aplastic anaemia; ischaemic injury; myocardial infarction; stroke; reperfusion injury; amyotrophic lateral sclerosis; PCR primer; T3.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        New Mch6 polypeptides and genes encoding the polypeptides useful for diagnosing, treating or reducing the severity of cell death-mediated diseases such as neurodegenerative diseases e.g. Alzheimer's disease. Parkinson's disease.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         .;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            0.3%; Score 17; DB 1; Length 17;
100.0%; Pred. No. 2.5e+02;
ive 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Sequence 17 BP; 5 A; 4 C; 6 G; 2 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Litwack G;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             used to isolate the cDNA encoding human MCH6
                                                                                                                                                                                                                                                                                                                                                       I3 PCR primer for MCH6 cDNA isolation.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Alnemri ES, Fernandes-Alnemri T,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Example 1; Page 7; 15pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Query Match
Best Local Similarity 100.0%; Pr
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  16 CAGGAATTCGGCACGAG 32
                                           1 caddaarrcddcacdad 17
                                                                                                                                                                                        AAS12632 standard; DNA; 17 BP
16 CAGGAATTCGGCACGAG 32
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               22-DEC-2000; 2000US-00746731.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   97US-00865579.
99US-00257218.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                (ALNE/) ALNEMRI E S.
(FERN/) FERNANDES-ALNEMRI T.
(LITW/) LITWACK G.
                                                                                                                                                                                                                                                                                                   04-DEC-2001 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  WPI; 2001-535542/59.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          US2001016345-A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        29-MAY-1997;
25-FEB-1999;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              23-AUG-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Synthetic.
                                                                                                                                                                                                                                                  AAS12632;
                                                                                                                                                                                                    셤
```

à

; 0

Gaps . 0

Query Match Best Local S

Matches

요

```
Human; apoptotic protease; Mch6; aspartate-specific cysteine protease; cell death; cancer; autoimmune disease; systemic lupus erythematosus; viral infection; degenerative disorder; Alzheimer's disease;
                                                                                                                                                  Parkinson's disease; myelodysplastic syndrome; myocardial infarction;
stroke; PCR primer; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Isolated gene encoding a human apoptotic protease known as Mch6, usefin the diagnosis or treatment of cell death-mediated conditions, e.g. cancers and autoimmune diseases such as systemic lupus erythematosus.
                                                      Primer for DNA encoding aspartate-specific cysteine protease Mch6.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Alnemri ES, Fernandes-Alnemri T, Litwack
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Example 1; Page 7; 15pp; English
                                                                                                                                                                                                                                                                                                                             97US-00865579.
                                                                                                                                                                                                                                                                                                                                                                 97US-00865579
                  (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                   (ALNE/) ALNEMRI E S.
(FERN/) FERNANDES-ALNEMRI
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     WPI; 2001-389294/41.
                                                                                                                                                                                                                                                                                                                                                                                                                                         LITWACK G.
                                                                                                                                                                                                                                              US2001006779-A1
                                                                                                                                                                                                            Homo sapiens.
                                                                                                                                                                                                                                                                                                                           29-MAY-1997;
                                                                                                                                                                                                                                                                                                                                                                 29-MAY-1997;
                22-AUG-2001
                                                                                                                                                                                                                                                                                       05-JUL-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ADE52023;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           16
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                         (LITW/)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          RESULT 365
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Matches
ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               The invention relates to an isolated gene encoding apoptic protease, mammalian ced-3 homologue 6 (Mch6). Mch6 is a member of the aspartate-specific cysteine protease (ASCP) family. Mch6 DNA and protein sequences are useful for modulating apoptosis for the therapeutic treatment of human diseases. Mch6 sequences are useful for upregulating apoptosis (e.g. for treating apoptosis (e.g. for treating apoptosis or treating along a crebellar degeneration). The Mch6 sequence is useful for disease or crebellar degeneration). The Mch6 sequence is useful for diseases, as well as other diseases mediated by either increased or decreased programmed cell death. The present sequence is a primer, used for cloning and characterisation of Mch6
                                                                                                                                                                                                                                                               Apoptic protease; mammalian ced-3 homologue 6; Mch6; cancer; aspartate-specific cysteine protease; ASCP; apoptosis; therapy; autoimmune disease; cerebellar degeneration; Alzheimer's disease; cytostatic; Parkinson's disease; immunomodulator; antimicrobial; viral infection; cell death-mediated disease; neuroprotective; primer;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  New apoptotic genes and their apoptotic protease products, useful for modulating apoptosis for the therapeutic treatment of human diseases, e.g. cancers, autoimmune disease, Alzheimer's disease or Parkinson's
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                0.3%; Score 17; DB 1; Length 17; 00.0%; Pred. No. 2.5e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      0, Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Sequence 17 BP; 5 A; 4 C; 6 G; 2 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Litwack G;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        100.0%; Pred. ...
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Fernandes-Alnemri T,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Example 1; Col 12; 36pp; English.
                17
                                                                                                              BP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            32
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  (UYJE-) UNIV JEFFERSON THOMAS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     99US-00257218.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            97US-00865579
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CAGGAATTCGGCACGAG
                CAGGAATTCGGCACGAG
                                                                                                              AAD15659 standard; DNA; 17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            16 CAGGAATTCGGCACGAG
                                                                                                                                                                                      (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      17; Conservative
                                                                                                                                                                                                                            Ţ3
                                                                                                                                                                                                                          Mch6 cloning primer,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              WPI; 2001-528686/58
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                     Unidentified
                                                                                                                                                                                                                                                                                                                                                                                                                                         US6271361-B1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     25-FEB-1999;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            29-MAY-1997;
                                                                                                                                                                                        15-NOV-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Alnemri ES,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               07-AUG-2001
                                                                                                                                                    AAD15659;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          e.g. candisease.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Matches
```

useful

ö

H

```
The present PCR primer was used to amplify DNA encoding an apoptotic protease, designated Mch6. Mch6 is an aspartate-specific cysteine protease, Mch6 polypetides and polynucleotides can be used to diagnose, treat or reduce the severity of cell death-mediated conditions, e.g. cancers, autoimmune diseases such as systemic lupus erythematosus, viral infections such as herpesvirus, degenerative disorders auto as Alzheimer's disease and Parkinson's disease, myelodysplastic syndromes such as myocardial infarction and stroke. They can also be used to screen
                                                                                                                                                                                                                                                                                                                                                                                                Gape
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  gene therapy; aspartate-specific cysteine protease agonist; aspartate-specific cysteine protease antagonist; whis; mammalian ced-3 homologue 6; apoptosis; cancer; viral infection; degenerative disorder; Albeiners disease; Parkinsons disease; myocardial infarction; human; mammalian ced-3 homologue 6; Mch6; PCR;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 cardiant; apoptosis modulator; aspartate-specific cysteine protease;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     cytostatic; virucide; nootropic; neuroprotective; antiparkinsonian;
                                                                                                                                                                                                                                                                                                                                                                                                ö
                                                                                                                                                                                                                              for compounds that inhibit or promote Mch6 mediated apoptosis
                                                                                                                                                                                                                                                                                                                                 Score 17; DB 1; Length 17;
Pred. No. 2.5e+02;
0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Mammalian ced-3 homologue 6 related primer seq id 5.
                                                                                                                                                                                                                                                                                 Sequence 17 BP; 5 A; 4 C; 6 G; 2 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                   0.3%; Scur
100.0%; Pre
                                                                                                                                                                                                                                                                                                                                                                                                                                                      32
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1 CAGGAATTCGGCACGAG 17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ADE52023 standard; DNA; 17 BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                      CAGGAATTCGGCACGAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        29-JAN-2004 (first entry)
                                                                                                                                                                                                                                                                                                                                                                 Local Similarity 100.
Les 17; Conservative
```

AAH25194 standard; DNA; 17 BP

RESULT 364

È 셤 AAH25194;

```
19 AAAAAAAAAAAAAAAA
WO2004080406-A2
                          23-SEP-2004
  à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           셤
                                                                                                                                                                                                                                                                                                                                     The invention describes an isolated gene (I) encoding Mch6 (mammalian ced -3 homologue 6), or a functional fragment of it. (I) And the polypeptide encoded by (I) is used to modulate apoptosis for the therapeutic treatment of human diseases. (I) Is used to prepared a recombinant aspartate-specific cysteine protease, that it encodes. The recombinant protease can be used to screen for Mch6 inhibitors. Disorders involving apoptosis that can be disagnosed or treated by (I) or the polypeptide incodes, including cancers, viral infections, degenerative disorders, such as Alzheimers and Parkinsons disease, and myocardial infarction. This sequence represents a primer used in the isolation of human mammalian ced-3 homologue 6 (Mch6), a member of the aspartate-specific cysteine protease (ASCP) family of proteases.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic; cytostatic; anticonvulsant; nootropic; muscula; anti-HIV; RNA interference; iRNA; antisense technology; lipid metabolism; cholesterol imbalance; dyslipidaemia hypercholesterolaemia; coronary artery disease; CAD; coronary heart disease; CHD; atherosclerosis; hepatic glucose production; glucose-metabolism-related disorder; diabetes; cancer; breast cancer; solon cancer; lung cancer; aneurological disease; Huntington disease; spinocerebellar ataxia; viral disease; AIDS; hepatitis C virus; HCV; ss.
                                                                                                                                                                                                                                                                 New isolated gene encoding a mammalian ced-3 homolog 6, for modulating apoptosis for the therapeutic treatment of human diseases, such as cancers and degenerative disorders.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          .
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               0.3%; Score 17; DB 1; Length 17; 100.0%; Pred. No. 2.5e+02; ative 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Hepatitis C virus (HCV) oligonucleotide segid 6180.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Sequence 17 BP; 5 A; 4 C; 6 G; 2 T; 0 U; 0 Other;
                                                                                                                                                                                                                   Fernandes-Alnemri T, Litwack G;
                                                                                                                                                                                                                                                                                                                   Example 1; SEQ ID NO 5; 15pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    16 CAGGAATTCGGCACGAG 32
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1 caggaarrccccaccac 17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ADR81681 standard; DNA; 19 BP
                                                                                                                                                                                             (UYJE-) UNIV JEFFERSON THOMAS
                                                                                                                                            29-MAY-1997; 97US-00865579.
25-FEB-1999; 99US-00257218.
                                                                                                                                                                    22-DEC-2000; 2000US-00746731.
                                                                                                                   29-JAN-2002; 2002US-00059749.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          16-DEC-2004 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Best Local Similarity 100.0
Matches 17; Conservative
                                                                                                                                                                                                                                             WPI; 2004-040943/04.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Hepatitis C virus.
                                                                     US2002183504-A1.
                                             Homo sapiens.
                                                                                                                                                                                                                       Alnemri ES,
          primer; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ADR81681;
                                Synthetic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   RESULT 366
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ADR81681/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ठ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               원
```

```
The invention describes a RNA interference (iRNA) agent (I) comprising a sense sequence and an antisense sequence, where the sense sequences have sense sequence and an antisense sequence, where the sense sequences have one or more asymmetrical 2'-0 alkyl modifications, the antisense concernse asymmetrical phosphorothioate modifications and the antisense sequence targets a human gene sequence. Also described and the antisense sequence targets a human gene sequence. Also described and the antisense sequence targets a human gene sequence. Also described are: a pharmaceutical preparation comprising (I); reducing (I); reducing (I); involves selecting a sequence with activity and introducing one or more asymmetrical modification in the sequence, where contrivity; a kit comprising (I) and instruction for its use; and a device that can be dispense or administer a composition comprising (I). (I) is conseful for reducing apoB-100 levels or glucose-6-phosphatase levels. The subject is suffering from a disorder characterised by elevated or cherwise unwanted expression of apoB-100, elevated or otherwise unwanted controllesterolasmical adjoorder characterised by elevated or disorder is chosen from the HDD/LDL cholesterol imbalance, disease (CHD) and atherosclerosis. (I) is administered to a subject to inhibit hepetic glucose production or for treating glucose-metabolism. Controllesterolasmia, coronary attery disease (CAD), coronary heart disease (CHD) and atherosclerosis. (I) is administered to a subject to inhibit hepetic glucose production or for treating glucose-metabolism.

Controllesterolasmia, coronary attery disease (CAD), coronary heart controllesterolasmia, coronary attery disease. (I) is useful for related disorder e.g. diabetes or type-2 diabetes. (I) is useful for related disorder e.g. diabetes or type-2 diabetes. (I) is useful for related disorder e.g. diabetes or type-2 diabetes. (I) is useful for represents a hepatitis C virus (HCV) antisense oligonucleotide that can represent a hepatitis C virus (HCV) antisen
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Interference RNA agent useful for treating dyslipidemias, coronary disease, diabetes, cancer or neurological disease, comprises sense sequence and antisense sequence which has specific modifications.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          0.3%; Score 17; DB 1; Length 19;
100.0%; Pred. No. 2.6e+02;
tive 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Sequence 19 BP; 0 A; 0 C; 2 G; 17 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Example 5; SEQ ID NO 6180; 378pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     5049 AAAAAAAAAAAAAAC 5065
                                                                                                                                                                   13-MAR-2003; 2003US-0454962P.
13-MAR-2003; 2003US-0455050P.
11-APR-2003; 2003US-0465894P.
17-APR-2003; 2003US-046565P.
25-APR-2003; 2003US-0465602P.
25-APR-2003; 2003US-0465802P.
09-MAY-2003; 2003US-0465802P.
08-AUG-2003; 2003US-0494597P.
26-SEP-2003; 2003US-0494597P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     09-0CT-2003; 2003US-0510246P.
10-0CT-2003; 2003US-0510318P.
07-NOV-2003; 2003US-0518453P.
08-MAR-2004; 2004WO-US007070
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Query Match
Best Local Similarity luv..
Local 17; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Manoharan M, Bumcrot D;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          (ALNY-) ALNYLAM PHARM.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       WPI; 2004-677362/66.
```

```
Antisense compounds targeted to nucleic acid encoding telomeric repeat binding factor 2 useful for treating conditions such as premature aging
                                                                  /mod_base= OTHER
/note= "phosphorothioate backbone"
                                                                                                                                                                   /*tag= c
/mod_base= OTHER
/note= "2-0-methoxyethyl"
                                                                                                                                        /note= "2-0-methoxyethyl"
                      Location/Qualifiers
1. .20
                                                                                                                         /mod_base= OTHER
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            BP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          34
                                                                                                                                                                                                                                                                                   14-DEC-2000; 2000WO-US033954
                                                                                                                                                                                                                                                                                                                                                                                                                                                         and diseases such as cancer.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     GGAATTCGGCACGAGGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            18 GGAATTCGGCACGAGGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ADJ45219 standard; DNA; 22
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   (first entry)
                                                     Q
                                                                                                            *tag= a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Local Similarity 100.
18 17, Conservative
                                                                                                                                                     13. .20
                                                     /*tag=
                                                                                                                                                                                                                                                                                                                                          (ISIS-) ISIS PHARM INC.
                                                                                                                                                                                                                                                                                                                                                                      Monia BP, Cowsert LM;
                                                                                                                                                                                                                                                                                                                                                                                                 WPI; 2001-398071/42.
                                                                                                                                                                                                                           WO200143752-A1
                          Key
modified_base
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             the invention
                                                                                                modified base
                                                                                                                                                       modified base
                                                                                                                                                                                                                                                                                                              17-DEC-1999;
Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   06-MAY-2004
                                                                                                                                                                                                                                                       21-JUN-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ADJ45219;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                RESULT 369
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Best Loc
Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Flea saliva proteins or their fragments may be used in formulations to treat or desensitise a host animal suffering from allergic dermatitis, they may also be used in an assay to determine if an animal is susceptible to allergic dermatitis. Saliva proteins taken from the mosquito, tick, mite, louse, ant, fly, true bug or spider may also be used in similar formulations. See ARR94658. Rour primers (AATI8423 amplification products of the flea saliva protein fspI
                                                                                                                                                       Flea saliva protein; allergic dermatitis; treatment; desensitise; assay; detection; diagnosis; mosquito; tick; mite; louse; ant; fly; true bug;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Ectoparasite saliva protein - used in treatment of, to desensitise host animal to, and in assay to determine if animal is susceptible to or has allergic dermatitis.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Antisense; phosphorothioate; human; telomeric repeat binding factor 2; inhibitor; premature aging; hyperproliferative disorder; cancer; cytostatic; 88.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Human telomeric repeat binding factor 2 oligonucleotide 111369.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    0.3%; Score 17; DB 1; Length 20;
100.0%; Pred. No. 2.6e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Sequence 20 BP; 1 A; 9 C; 6 G; 4 T; 0 U; 0 Other;
                                                                                                                           Primer for amplifying flea saliva protein (fspI).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           100.0%; Preα. ...
ive 0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Example 6C; Page 134; 255pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                Wallenfels L;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            5069 AGGGGGGCCCGGTACC 5085
                                        AAT18426 standard; DNA; 20 BP.
                                                                                                                                                                                                                                                                                                                          94US-00319590.
95US-00487001.
95US-00487608.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AAH20641 standard; DNA; 20 BP.
                                                                                                                                                                                                                                                                                                 95WO-US013200.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               20 AGGGGGGCCCGGTACC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     (first entry)
                                                                                                (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Local Similarity 100.
nes 17; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                Frank GR, Hunter SW,
                                                                                                                                                                                                                                                                                                                                                                                                                                            WPI; 1996-209852/21.
                                                                                                                                                                                                                                                                                                                                                                                    (HESK-) HESKA CORP
                                                                                                                                                                                                                                          WO9611271-A1.
                                                                                                                                                                                                                                                                                                                          07-OCT-1994;
07-JUN-1995;
07-JUN-1995;
                                                                                                16-OCT-1996
                                                                                                                                                                                                                                                                                                 36-OCT-1995;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   13-AUG-2001
                                                                                                                                                                                                                                                                      18-APR-1996
                                                                                                                                                                                spider; ss
                                                                                                                                                                                                               Synthetic.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AAH20641;
                                                                  AAT18426
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Query Match
           RESULT 367
AAT18426/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  RESULT 368
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Matches
```

```
ö
                                                                   This invention describes a novel antisense compound (I) 8-30 nucleobases in length targeted to a polynucleotide encoding human telomeric repeat binding factor 2 (II) which specifically hybridizes with, and inhibite the expression of (II). (I) is useful for treating a human having a disease or condition associated with (II) such as premature aging or a hyperproliferative disorder especially cancer, by inhibiting the expression of (II) in human cells or tissues. (I) is useful for disagnostics, therapeutics, prophylaxis and as research reagents and kits. The products of the invention have cytostatic activity. This sequence represents an antisense oligonucleotide used to illustrate the method of
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        p53 protein; cell cycle control; apoptosis; oesophageal tumour; pancreatic tumour; colorectal tumour; renal cell carcinoma; cervical carcinoma; cancer; p21 promoter; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ô
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Length 20;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sequence 20 BP; 2 A; 9 C; 4 G; 5 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                0.3%; Score 17; DB 1; Le
100.0%; Pred. No. 2.6e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                100.0%; Pred. ...
Example 15; Page 79; 108pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         p21 promoter, oligonucleotide #3.
```

AAH20641,

셤 ò

ADH26737;

```
The invention relates to a method (MI) of identifying compounds that modulate the binding of p53 protein to a gene of interest, involving the gene of interest as chromatin-assembled DNA, contacting the gene of interest with the p53 protein and a test compound, and determining whether the presence of the test compound modulates the compound modulates the compound modulates the binding of the p53 to the gene of interest. Also described are the collowing: (1) Identifying a modulator that inhibits growth of cancer cells, which involves providing a gene construct comprising a chromatin assembled DA1 promoter linked to a reporter gene, where the promoter interests binding of the p53 protein to the gene construct by measuring the amount of reporter gene activity in the presence and absence of the cinteraction of p53 protein to the gene construct by measuring the amount of reporter gene activity in the presence and absence of the cinteraction of p53 protein with a transcription of contror hink as construct by measuring the amount of reporter gene activity in the presence and absence of the amount of reporter gene activity in the presence and absence of the contror in the p53 protein to bound to a gene of interest, which involves providing the gene of interest with the p53 protein the presence of the test compound, and determining whether the presence of contacting the gene of interest with the p53 protein comprises a human p53 protein, recombinant p53 protein or p53 protein comprises a human p53 protein, recombinant p53 protein or p53 protein comprises a contacting the gene of interest with a cell nuclear extract. The gene of interest with a cell nuclear extract. The gene of interest with a cell nuclear extract. The gene of the test compound modulates the p53 controlled contacting the gene of interest with a cell nuclear extract. The gene of the test compound modulates the p53 controlled contacting the gene of interest with a cell modulates the p53 controlled contacting the gene of interest with a cell modulate the pre
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Identifying compounds that modulate binding of p53 protein to gene, by providing gene as chromatin-assembled DNA and contacting with protein and test compound, and determining whether compound modulates binding of p53.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      invention relates to a method (M1) of identifying compounds that
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Sequence 22 BP; 5 A; 5 C; 7 G; 5 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Example 1; SEQ ID NO 7; 20pp; English.
                                                                                                                                                                                                                                                                                                        24-MAR-2003; 2003US-00397131
                                                                                                                                                                                                                                                                                                                                                                                                              22-MAR-2002; 2002US-0366897P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            and the p21 promoter.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Emerson BM, Espinosa J;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     EMERSON B M.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            WPI; 2004-167208/16.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     (ESPI/) ESPINOSA J.
                                                                                           US2003228627-A1.
Homo sapiens.
                                                                                                                                                                                                 11-DEC-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     EMER/)
```

```
Sequence 20 BP; 7 A; 2 C; 2 G; 9 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                          3969 TITAAAGCAIGATITAAAGI 3988
                                                                                                                                                                                                                                                                                                                                    1 rrraaarcargcrrraaagr 20
                                                                                                                                                                                                                                                                                                                                                               BP.
                                                                                                                                                                                                                                                                                                                                                              ADL34626 standard; DNA; 20
                                                                                                                                                                                                                                                                                                                                                                                   (first entry)
                                                                                                                                                                                                                                                                                                                Conservative
                                                                                                                                                                                                                                                                                                    Query Match
Best Local Similarity
Matches 18; Conserv
                                                                                                                                                                                                                                                                                                                                                                                   17-JUN-2004
                                                                                                                                                                                                                                                                                                                                                                        ADL34626;
                                                                                                                                                                                                                                                                                                                                                    RESULT 371
a
                                                                                                                                                                                                                                                                                                                                                              SAXEX
                                                                                                                                                                                                                                                                                                                          ð
                                                                                                                                                                                                                                                                                                                                         Gaps
                                                                                                                                                                                                                                                                                                                                         ;
0
                                                                                                                                                                                                                                                                                                                             0.3%; Score 17; DB 1; Length 22;
00.0%; Pred. No. 2.7e+02;
ve 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                             0.33,
100.0%; Pre
                                                                                                                                                                                                                                                                                                                                                   25
                                                                                                                                                                                                                                                                                                                                                            cececrecaecaarree 17
                                                                                                                                                                                                                                                                                                                                                  9 CGGGCTGCAGGAATTCG
                                                                                                                                                                                                                                                                                                                           Query Match 0.3
Best Local Similarity 100.
Matches 17; Conservative
```

```
Human PI3K regulatory subunit 4, p150 DNA antisense oligonucleotide #62.
                                                                                                                                     Human; phosphoinositide-3-kinase regulatory subunit 4; p150; P13K; P13 kinase; ss; antisense oligonucleotide; phosphorothioate linkage; 2'-O-methoxyethyl sugar moiety; 5-methylcytosine; hyperproliferative disorder; cancer; Chediak-Higashi syndrome; neurodegenerative disorder; metabolic disorders; inflammation; cytostatic; immunomodulator; neurodegenerative; antimicrobial;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   New antisense oligonucleotides inhibiting the expression of bhosphoinositide-3-kinase, regulatory subunit 4, p150, useful for preventing or treating diseases associated with the subunit, e.g. hyperproliferative discorders.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Example 15; SEQ ID NO 72; 62pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        31-MAY-2002; 2002US-00160786.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                31-MAY-2002; 2002US-00160786.
(first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 (ISIS-) ISIS PHARM INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Dobie KW;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  WPI; 2004-051923/05.
                                                                                                                                                                                                                                                                                                                                                                      antiinflammatory.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       US2003225013-A1.
11-MAR-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                      Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   04-DEC-2003.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Freier SM,
```

The invention relates to a compound targeted to a nucleic acid molecule encoding human phosphoinositide-3-kinase (PI3K) regulatory subunit 4, p150. The compound is an antisense eligonucleotide that specifically hybridises with a nucleic acid molecule encoding P13K regulatory subunit 4, p150 and inhibits expression of the polypeptide. The antisense oligonucleotide comprises at least one modified internucleoside linkage i.e. a phosphorotchioare linkage, at least one modified sugar moiety, preferably a 2'-O-methoxyethyl sugar moiety, or at least one modified nucleobase comprising a 5-methyloytosine. The antisense compounds are useful for modulating the expression of P13K regulatory subunit 4, p150 and for preventing or treating hyperproliferative disorders (i.e. cancer), Chediak-Higashi syndrome, neurodegenerative disorders and metabolic disorders. These may also be used in research and diagnostics and in preventing or delaying infection or inflammation. This sequence represents an antisense oligonucleotide of the invention.

Gaps .; 0 0.3%; Score 16.8; DB 1; Length 20; 90.0%; Pred. No. 2.7e+02; ive 0; Mismatches 2; Indels

ö

ADH26737 standard; DNA; 20 BP.

RESULT 370 ADH26737

ઠે g

```
JAGGED; JAGGED1; hJAGGED1; human; notch ligand; stem cell; progenitor cell; haematopoiesis; cell differentiation; Alagille syndrome; leukaemia; lymphoma; diagnosis; therapy; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                New Jagged peptides for inhibiting differentiation of progenitor cells also used for maintaining these cells in undifferentiated state, e.g. for haematopoietic reconstitution.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               This nucleotide sequence comprises the intron 10-exon 11 boundary of the human JAGGED1 gene. 47 Intron/exon boundaries have been defined (see AAX06701-47) by comparison of genomic sequences from bacterial artificial chromosome 49D9 and an isolated cDNA clone (see AAX05753). Exon 11 corresponds to nucleotides 1762-1808 of the hAAGGED1 cDNA. hJAGGED1 (see also AAW87894) is a Notch ligand capable of inhibiting the differentiation of haemacopoletic progenitor cells. Mutation of the hJAGGED1 gene is associated with Alagille syndrome. The Jagged1 gene has
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Agrobacterium tumefaciens NT1130; 1,5-anhydroglucitol dehydrogenase; 1,5-AGDH; detection; diabetes; PCR primer; ss.
                                                                                                                                                                                                                                                                                                                              exon 11 (exon length is 47 bp)"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    0.3%; Score 16.8; DB 1; Length 20; 90.0%; Pred. No. 2.7e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1,5-anhydroglucitol dehydrogenase PCR primer SEQ ID NO:25.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Seguence 20 BP; 7 A; 0 C; 2 G; 11 T; 0 U; 0 Other;
                      Human JAGGED1 gene intron 10-exon 11 boundary.
                                                                                                                                                                                                                                                              of intron 10'
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 (UNIW ) UNIV WASHINGTON.
(CHIL-) CHILDRENS HOSPITAL PHILADELPHIA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Spinner NB
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   seen mapped to human chromosome 20p12
                                                                                                                                                                                            Location/Qualifiers
                                                                                                                                                                                                                                                                                                                              end of
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Example 4; Fig 6B; 101pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           622 TATTTTCAGATATTCATGA 641
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1 ratrititadaratradra 20
                                                                                                                                                                                                                                                              end
                                                                                                                                                                                                                                                                                                                                                                                                                                                               98WO-US013207.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ВР
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          97US-00882046
                                                                                                                                                                                                                   1. .10
/*tag= a
/note= "3'
                                                                                                                                                                                                                                                                                                       /*tag= b
/note= "5'
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Hood L, Krantz ID,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AAF32481 standard; DNA; 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Agrobacterium tumefaciens.
                                                                                                                                                                                                                                                                                  11. .20
/*tag= }
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            WPI; 1999-081220/07.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Local Similarity
les 18; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                               25-JUN-1998;
                                                                                                                                                   ното варіеля
                                                                                                                                                                                                                                                                                                                                                                           WO9858958-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          25-JUN-1997;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       19-APR-2001
                                                                                                                                                                                                                                                                                                                                                                                                                    30-DEC-1998
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AAF32481;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Query Match
                                                                                                                                                                                                                       intron
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Li L,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        RESULT 373
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Matches
                                                                                                                                                                                                                                                                                       exon
                                                                                                                                                                                              Key
  SXXXXXXXXXXXX
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               This invention describes a novel antisense oligonucleotides which specifically hybridises to and inhibits the expression of human phosphoinositide-1-kinase, regulatory subunit 4, p150. The plantage oligonucleotides comprises at least one modified internucleoside linkage, preferably a phosphorothioate linkage. It also comprises at least one modified augar moiety, preferably a 2'-0-methoxyethyl sugar moiety. The antisense oligonucleotide further comprises at least one modified on ucleobase, preferably a 5-methylcytosine. The antisense oligonucleotide further comprises at least one modified can be used in diagnostics and as research reagents and kits. It can also be used prophylactically, e.g. to prevent or delay infection, inflammation or tumour formation. It can also be used to treat a disease
                                    antisense; inhibitor; hybridisation; human; phosphoinositide-3-kinase; regulatory subunit 4; p150; internucleoside linkage; phosphorothioate linkage; 2'-O-methoxyethyl sugar; 5-methylcytosine; infection; inflammation; tumour formation; hyperproliferative disorder; cancer; Chediak-Higashi syndrome; metabolic disorder; immunomodulator; cytostatic; gene therapy; ss; primer.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  subunit 4, p150, e.g. hyperproliferative disorder, preferably cancer, Chediak-Higashi syndrome or a metabolic disorder. The products of the invention are immunomodulators with cytostatic activity and can be used
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       New antisense compound targeted to a nucleic acid molecule encoding phosphoinositide-3-kinase, regulatory subunit 4, p150, useful for treating cancer, Chediak-Higashi syndrome or a metabolic disorder.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                condition associated with phosphoinositide-3-kinase, regulatory
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        .
.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          0.3%; Score 16.8; DB 1; Length 20; 90.0%; Pred. No. 2.7e+02; ive 0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                           /note= "phosphorothioate backbone"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Sequence 20 BP; 7 A; 2 C; 2 G; 9 T; 0 U; 0 Other;
antisense oligonucleotide ISIS 207026.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Example 15; SEQ ID NO 72; 60pp; English
                                                                                                                                                                                                                                       Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              3969 TITAAAGCATGATITAAAGT 3988
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          20
                                                                                                                                                                                                                                                                                                       /mod_base= OTHER
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1 Trraatcargcrrraagr
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       BP
                                                                                                                                                                                                                                                                                                                                                                                                                                                               18-SEP-2003; 2003US-00667022
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        31-MAY-2002; 2002US-00160786
                                                                                                                                                                                                                                                         ...20
*tag= a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AAX06717 standard; DNA; 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Freier SM, Dobie KW;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            WPI; 2004-282523/26.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 (FREI/) FREIER S M. (DOBI/) DOBIE K W.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Local Similarity
les 18; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         gene therapy
                                                                                                                                                                                                                                                                                                                                                                      US2004063657-A1
                                                                                                                                                                                                                                       Key
modified_base
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           26-APR-1999
                                                                                                                                                                                                                                                                                                                                                                                                                    01-APR-2004
                                                                                                                                                                                              Synthetic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AAX06717;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Query Match
```

ö

Gape

ö

Indels

RESULT 372

용 ઠ

AAX06717
ID AAX0
XX
AC AAX0
XX
DT 26-A

Matches

that

reactions,

```
The invention by towards a novel spacem to perturning traditions, that comprises a first solid support with a reactant of each reaction impobilized on to it, and a second solid support either providing a second reactant confined to a specific area on the surface, or a chemical factorial separation of the reactions, where the first and second solid supports are assembled to provide an environment for performing the reactions in parallel. The methods and apparatus are useful for certions in parallel. The methods and apparatus are useful for performing a large number of chemical and bhological reactions. Sequence variations, expression levels and their functions. The method is capable of generating large amounts of data or products per unit time by carrying out large numbers of reactions in parallel. The process is also menable to full automation. The present sequence represents a control probe used in detecting amplified products by allele specific extension, the products amplified by performing large numbers of PCR reactions using array-immobilised and releasable primers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                New antisense oligonucleotide for modulating endothelial lipase expression, for diagnosing, preventing or treating e.g. dyslipidemia, low high density lipoprotein or cardiovascular disorders.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Antilipaemic; Cardiovascular; Analgesic; Antianginal; Antisense therapy; Human; Endothelial Lipase; dyslipidaemia; high density lipoprotein; HDL; cardiovascular disorder; metabolic syndrome X; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      /note= "This oligonucleotide has a phosphorothioate backbone and 2-"methyoxyethyl (2.*MpB) wings at the 5' and 3' ends, which are 4 nucleotides in length. Also all cytidine residues are 5-methylcytidines"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Human endothelial lipase antisense oligonucleotide, SEQ ID 1293.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           0.3%; Score 16.8; DB 1; Length 20; 90.0%; Pred. No. 2.7e+02; ative 0; Mismatches 2; Indels
            invention provides a novel system for performing
                                                                                                                                                                                                                                                                                                                                                                                                                           Sequence 20 BP; 5 A; 5 C; 5 G; 5 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Claim 3; SEQ ID NO 1293; 1007pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Location/Qualifiers
1. .20
/*tag= a
/mod_base= OTHER
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       4769 TGACTGACTGACTAAATGAC 4788
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          20 TGACTGACTGACTGAC 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         19-JUL-2002; 2002US-0397106P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         18-JUL-2003; 2003WO-US022410.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ADJ22895 standard; DNA; 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       20-MAY-2004 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      (PHAA ) PHARMACIA CORP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    WPI; 2004-132912/13.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           WO2004009541-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Antilipaemic;
Human; Endothe
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Key
modified_base
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              18;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           29-JAN-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Synthetic.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ADJ22895;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           RESULT 375
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Homo
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ADJ22895
XX
AC
ADJ2
XX
AC
DB
XX
AL
DB
A
               ે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ö
                                                                                                                                                                                                                                                                                                           A gene encoding 1,5-anhydroglucitol dehydrogenase, a recombinant vector containing the gene, a transformant containing the recombinant vector and a recombinant 1,5-anhydroglucitol dehydrogenase protein prepared from the
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              The present invention describes the 1,5-anhydroglucitol dehydrogenase protein (1,5-AGDH) isolated from Agrobacterium tumefaciens. The 1,5-AGDH protein is useful as a detecting reagent for early stage diabetes. The present sequence represents a PCR primer for 1,5-AGDH, which is used in an example from the present invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Negative control probe used in detection by allele specific extension.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Apparatus and method for performing a large number of chemical and biological reactions by bringing two arrays into close apposition and allowing reactants on the surfaces of the two arrays to come into
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Immobilisation; chemical; biological; polynucleotide amplification; nucleic acid detection; probe; hybridisation; PCR primer; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       .;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               0.3%; Score 16.8; DB 1; Length 20; 90.0%; Pred. No. 2.7e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Sequence 20 BP; 4 A; 7 C; 3 G; 6 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Berninger M;
                                                                                                                                                                                                                                                                                                                                                                                                                                     Example 2; Page 17; 22pp; Japanese.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Example 11; Fig 18B; 112pp; English
                                                                                                                                                                                                                (DAII-) DAIICHI KAKAGU YAKUHIN KK
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          587 GCATTGCTCCCTCCCAGATC 606
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GCÁTTGCTCCTTCAAGATC 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AAF83180 standard; DNA; 20 BP
                                                                                                                       99JP-00133157,
                                                                                                                                                                     99JP-00133157
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              99US-0158315P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            06-OCT-2000; 2000WO-US027872.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Chatelain F,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          (PROT-) PROTOGENE LAB INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Conservative
                                                                                                                                                                                                                                                                   WPI; 2001-128253/14.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          WPI; 2001-290733/30.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Similarity
                         JP2000316570-A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                WO200127327-A2
                                                                                                                                                                                                                                                                                                                                                                                       transformant.
                                                                                                                                                                     13-MAY-1999;
                                                                                                                    13-MAY-1999;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Mar
Local Sim
18;
                                                                       21-NOV-2000.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         08-OCT-1999;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           09-JUL-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              19-APR-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Brennan TM,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Synthetic.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Query Match
Best Local S:
Matches 18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 contact
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  RESULT
ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          셤
```

ö

Gaps

.. 0

```
ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  The present invention relates to an antisense compound targeted to a nucleic acid molecule encoding Navi.3, where the antisense compound specifically hybridizes with and inhibits the expression of Navi.3. The compound and composition are useful for treating a disease or condition associated with Navi.3, e.g. pain including but not limited to neuropathic pain, post-herpetic neuralgia, chronic pain, lower back pain, pain from burns, migraine headache, cluster headache, mid-to-moderate pain from burns, migraine headache, cluster headache, mid-to-moderate but not limited to neonatal or infantile epilepsy, or ataxia. The present but not limited to neonatal or infantile epilepsy, or ataxia. The present a deoxy gap. Used during the antisense inhibition of human Navi.3 expression, the oligonucleotides are designed to target different regions of the human Navi.3 RNA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           New antisense compound targeted to a nucleic acid molecule encoding abavi.3, useful for useful for treating a disease or condition associated with Navl.3, e.g. pain, selzure disorder such as childhood seizure disorder, or ataxia.
              The present invention relates to antisense oligonucleotides (ADJ21603-ADJ25510) targeted to human Endothelial Lipase (EL) coding sequence (ADJ25517), where the antisense oligonucleotide specifically hybridises with and inhibits the expression of EL. The antisense oligonucleotides are useful for modulating the expression of endothelial lipase in cells or tissues to treat diseases associated with EL expression, such as dyslipidaemia, low high density lipoprotein (HDL), cardiovascular disorder or metabolic syndrome X. In addition, the oligonucleotides are used for diagnostics, prophylaxis, or as research reagents or kits.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Navl.3; Analgesic; Nootropic; Neuroprotective; post-herpetic neuralgia; diabetic neuropathy; arthritic pain; migraine headache; infantile epilepsy; ataxia; ss.
                                                                                                                                                                                                                                                                                                          Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Chimeric phosphorothioate oligonucleotide to target Navl.3 #8124.
                                                                                                                                                                                                                                                                                                          ö
                                                                                                                                                                                                                                                                0.3%; Score 16.8; DB 1; Length 20; 90.0%; Pred. No. 2.7e+02; ive 0; Mismatches 2; Indels
                                                                                                                                                                                                                         Sequence 20 BP; 6 A; 5 C; 4 G; 5 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Claim 4; SEQ ID NO 8124; 417pp; English
                                                                                                                                                                                                                                                                                                                                                 983 CACACAAATCTGGAGTTCGT 1002
                                                                                                                                                                                                                                                                                                                                                                                       1 CACACAAATCTGGACTTGGT 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                BP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     14-AUG-2003; 2003WO-US025465.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ADK80790 standard; DNA; 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             (first entry)
                                                                                                                                                                                                                                                                                   Local Similarity 90.0
les 18; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    (PHAA ) PHARMACIA CORP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     WPI; 2004-203785/19.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      WO2004016754-A2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           14-AUG-2002;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               20-MAY-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              26-FEB-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Roberds SL;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Synthetic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ADK80790;
                                                                                                                                                                                                                                                                Query Match
                                                                                                                                                                                                                                                                                       Best Loc
Matches
                                                                                                                                                                                                                                                                                                                                                                                     g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                $$99999999988$
                                                                                                                                                                                                                                                                                                                                                 ઠે
```

```
ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            The invention describes a new antisense compound, having a sequence comprising 8-30 bp targeted to a nucleic acid encoding endothelial specific molecule-1 (ESM-1), that specifically hybridises with the nucleic acid ESM-1 and inhibite its expression. Also described are: a composition; inhibiting the expression of ESM-1 in calls or tisques; and treating an animal having a disease or condition associated with ESM-1. The compound is useful for preparing a composition for treating diabetes,
                                                                                                                                                                                                                                                                                                               cytostatic; antidiabetic; immunomodulator; cardiant; neuroprotective; gene therapy; endothelial specific molecule-1; ESM-1; ESM-1 ESM-1 talated disorder; diabetes; cancer; ischaemia; reperfusion injury; angiogenic disorder; immunological disorder; cardiovascular disorder;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    New antisense compound, having a sequence targeted to a nucleic acid encoding endothelial specific molecule-1 (ESM-1), useful for preparing composition for treating e.g., diabetes, cancer or cardiovascular disorder.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          /note= "OTHER= phosphorothioate backbone. All cytidine residues are 5-methylcytidines"
                                                         Gape
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       nucleotides"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 /note= "OTHER= 2'-methoxyethyl (2'-MOE) nucleotides"
                                                         ö
                           DB 1; Length 20;
                                                       Indela
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       /*tag= a
/mod_base= OTHER
/note= "OTHER= 2'-methoxyethyl (2'-MOE)
20 BP; 17 A; 3 C; 0 G; 0 T; 0 U; 0 Other;
                          Score 16.8; DB 1;
Pred. No. 2.7e+02;
0; Mismatches 2;
                                                                                                                                                                                                                                                                                 Human ESM-1 antisense oligonucleotide segid 1867.
                                                                                                                                                                                                                                                                                                                                                                          neurological disorder; antisense technology; ss
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Claim 3; SEQ ID NO 1867; 555pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                  Location/Qualifiers
                                                                                     5046 AAAAAAAAAAAAAAAAAC 5065
                                                                                                                 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   /mod base= OTHER
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                /mod_base= OTHER
                                                                                                                 AAAAAACAAAAACAAAAAAC
                                                                                                                                                                                         ADL59618 standard; DNA; 20 BP
                           0.3%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    19-AUG-2002; 2002US-0404495P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        19-AUG-2003; 2003WO-US025833
                                                                                                                                                                                                                                                     (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Grigge DW;
                                                         Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  (PHAA ) PHARMACIA CORP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           WPI; 2004-248358/23.
                                         Local Similarity
les 18; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              WO2004021978-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Weinstein EJ,
                                                                                                                                                                                                                                                                                                                                                                                                                                                   modified base
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          modified base
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       modified base
                                                                                                                                                                                                                                                    03-JUN-2004
                                                                                                                                                                                                                                                                                                                                                                                                         Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          18-MAR-2004
Sequence
                                                                                                                                                                                                                        ADL59618;
                           Query Match
                                                                                                                                                           RESULT 377
                                                         Matches
                                                                                                                                                                            ADL59618/
                                                                                                                                                                                                                                                                                                                                                                                                                                      Key
                                                                                       ð
                                                                                                               셤
```

Š

```
18-MAR-2004.
                                                                                                                                                                                                                                                       03-JUN-2004
                                                                                                                                                                                                                                    ADL59682;
                                                                                                                                                                                               RESULT 379
                                                                                                                                                                                                        ADL59682,
                                                                                                                                                                                                                          8888888888888
                                                                                                                                                               셤
                                                                                                                                               ð
                                                                                      ö
                                                                                                                                                                                                                                                       cytostatic; antidiabetic; immunomodulator; cardiant; neuroprotective; gene therapy; endothelial specific molecule-1; ESM-1; estated disorder; diabbetes; cancer; ischaemia; reperfusion injury; angiogenic disorder; immunological disorder; cardiovascular disorder; neurological disorder; se.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         New antisense compound, having a sequence targeted to a nucleic acid encoding endothelial specific molecule-1 (ESM-1), useful for preparing composition for treating e.g., diabetes, cancer or cardiovascular
                                                                                                                                                                                                                                                                                                                                                                          /note= "OTHER= phosphorothioate backbone. All cytidine residues are 5-methylcytidines"
cancer, ischaemia or reperfusion injury, or angiogenic, immunological, cardiovascular or neurological disorder. This sequence represents an antisense oligonuclectide that can be used to modulate expression of
                                                                                                                                                                                                                                                                                                                                                                                                            /*tag= a
/mod_base= OTHER
/note= "OTHER= 2'-methoxyethyl (2'-MOE) nucleotides"
16. .20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 'note = "OTHER= 2'-methoxyethyl (2'-MOE) nucleotides"
                                                                                       Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            The invention describes a new antisense compound, having a sequence comprising 8-30 bp targeted to a nucleic acid encoding endothelial specific molecule-1 (ESM-1), that specifically hybridises with the
                                                                                       ö
                                                                  Score 16.8; DB 1; Length 20;
Pred. No. 2.7e+02;
                                                                                       2; Indels
                                                                                                                                                                                                                                       Human ESM-1 antisense oligonucleotide segid 1693.
                                                   BP; 7 A; 4 C; 0 G; 9 T; 0 U; 0 Other.
                                                                                         0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Claim 3; SEQ ID NO 1693; S55pp; English.
                               endothelial specific molecule-1 (ESM-1).
                                                                                                                                                                                                                                                                                                                                        Location/Qualifiers
                                                                                                           4354 ATGAAATAAGGTTTTGGGA 4373
                                                                                                                                                                                                                                                                                                                                                                                                                                                             base= OTHER
                                                                                                                                                                                                                                                                                                                                                                      /mod_base= OTHER
                                                                                                                               20 Argadarakarrirragga 1
                                                                                                                                                                                ADL59444 standard; DNA; 20 BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 19-AUG-2002; 2002US-0404495P
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              19-AUG-2003; 2003WO-US025833
                                                                      Query Match 0.3%;
Best Local Similarity 90.0%;
Matches 18; Conservative (
                                                                                                                                                                                                                                                                                                                                                                                                                                                   *tag= c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Griggs DW;
                                                                                                                                                                                                                        (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       (PHAA ) PHARMACIA CORP.
                                                                                                                                                                                                                                                                                                                                                   1. .20
/*tag=
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            WPI; 2004-248358/23.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           WO2004021978-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Weinstein EJ,
                                                                                                                                                                                                                                                                                                                                            Key
modified_base
                                                                                                                                                                                                                                                                                                                                                                                                   modified_base
                                                                                                                                                                                                                                                                                                                                                                                                                                           modified base
                                                                                                                                                                                                                                                                                                                         Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              18-MAR-2004
                                                     Sequence 20
                                                                                                                                                                                                                        03-JUN-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            disorder.
                                                                                                                                                                                                      ADL59444;
                                                                                                                                                               RESULT 378
ADL59444/c
                                                                                                                                                                           ADL59444/
                                                                                                                                                                                   원
       8
```

```
ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 New antisense compound, having a sequence targeted to a nucleic acid encoding endothelial specific molecule-1 (ESM-1), useful for preparing a composition for treating e.g., diabetes, cancer or cardiovascular disorder.
nucleic acid ESM-1 and inhibits its expression. Also described are: a composition; inhibiting the expression of ESM-1 in cells or tissues; and treating an animal having a disease or condition associated with ESM-1. The compound is useful for preparing a composition for treating diabetes, cancer, ischaemia or reperfusion injury, or angiogenic, immunological, cardiovascular or neurological disorder. This sequence represents an antisense oligonucleotide that can be used to modulate expression of endothelial specific molecule-1 (ESM-1).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                cytostatic; antidiabetic; immunomodulator; cardiant; neuroprotective; gene therapy; endothelial specific molecule-1; ESM-1; ESM-1 related disorder; diabetes; cancer; ischaemia; reperfusion injury; angiogenic disorder; immunological disorder; cardiovascular disorder; neurological disorder; antisense technology; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             /mod_base= OTHER
/note= "OTHER= phosphorothioate backbone. All cytidine
residues are 5-methylcytidines"
                                                                                                                                                                                                                                                                                                                                                                       Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                nucleotides"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         nucleotides"
                                                                                                                                                                                                                                                                                                                                                                       ö
                                                                                                                                                                                                                                                                                                            Length 20;
                                                                                                                                                                                                                                                                                                                                                                          Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   /mod_base= OTHER
/note= "OTHER= 2'-methoxyethyl (2'-MOE)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           se= OTHER
"OTHER= 2'-methoxyethyl (2'-MOE)
                                                                                                                                                                                                                                                        Sequence 20 BP; 8 A; 4 C; 0 G; 8 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Human ESM-1 antisense oligonucleotide segid 1931.
                                                                                                                                                                                                                                                                                                            Ouery Match
0.3%; Score 16.8; DB 1;
Best Local Similarity 90.0%; Pred. No. 2.7e+02;
Matches 18; Conservative 0; Mismatches 2;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Claim 3; SEQ ID NO 1931; 555pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                    4350 AGATATGAAAATAAGGTTTT 4369
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   20 AGGTATGAAAATAAGTTTT 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      19-AUG-2003; 2003WO-US025833
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          19-AUG-2002; 2002US-0404495P
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              pase=
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ADL59682 standard; DNA; 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      U
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Ω
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    /*tag= a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Weinstein EJ, Griggs DW;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   16. .20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              /mod_bag
/note=
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  (PHAA ) PHARMACIA CORP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           WPI; 2004-248358/23.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                WO2004021978-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                modified_base
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      modified_base
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Key
modified base
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Homo sapiens
```

Thu Aug 18

ö

```
Sequence 20 BP; 8 A; 4 C; 0 G; 8 T; 0 U; 0 Other;
                                                                                                                                                                                                     WLDLr gene, single nucleotide polymorphism #22.
                                                                                                                                                                                                                                                                                                                                       (COMP-) COMPLEXE HOSPITALIER SAGAMIE. (UYMC-) UNIV MCGILL.
                                                                                                                                                                                                                                                       Location/Qualifiers replace(11, C)
                                                                                                                     4353 TATGAAATAAGGTTTTGGG 4372
                                                                                                                                 20 TATGAAATAAGTTTTTAGG 1
                                                                                                                                                                 BP
                                                                                                                                                                                                                                                                                                                                                          Engert J, Vohl M, Brewer C,
                                                                                                                                                                                                                                                                                                                           08-MAR-2000; 2000US-0187787P
                                                                                                                                                                                                                                                                                                               08-MAR-2001; 2001WO-US007444
                                                                                                                                                           .777/c
AAS11777 standard; DNA; 21
                                                                                                                                                                                         (first entry)
                                                                                                  Best Local Similarity 90.0
Matches 18; Conservative
                                                                                                                                                                                                                                                                                                                                                                      WPI; 2001-522953/57.
                                                                                                                                                                                                                                                                                       WO200166801-A2
                                                                                                                                                                                                                                           Homo sapiens
                                                                                                                                                                                         07-NOV-2001
                                                                                                                                                                                                                                                                                                   13-SEP-2001
                                                                                                                                                                                                                                                        Key
variation
                                                                                                                                                                            AAS11777;
                                                                                            Query Match
                                                                                                                                                     RESULT 380
                                                                                                                                                           AAS11777/
ID AAS1
g
                                                                                                                                                                      ò
```

```
The present sequence is a sense primer for the PCR amplification of human matrix metalloproteinase 2 (MMP-2) cDNA. A 181 bp product is obtained using this sense primer with the antisense primer given in ACC57853. RT-PCR was performed in an example from the invention to determine expression profiles of MMP genes in human synovial cells in response to mechanical shear. A model-based analysis was used to identity the role of transcription factor binding motifs in gene regulation. The results provide an example of the method of the invention for determining expression levels of target genes based on sequence elements present in untranslated regulatory regions
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Predicting an expression level of a target gene or gene family comprises experimentally determining the number and type of cis-acting elements provided in 5' untranslated regulatory regions of the target gene.
absence or severity of a particular phenotype or disorder (e.g. cardiovascular disease such as coronary heart disease associated with a particular genotype. The nucleic acids containing the polymorphic sites may also be useful in forenatcs and paternity testing. Wild-type or variant nucleic acid molecules encoding VLDLr or wild-type or variant buchets can be used in the disgnosis and treatment of cardiovascular diseases and other diseases associated with VLDLr. The present sequence represents the coding sequence of VLDLr single
                                                                                                                                                                                                                                                                                                                                                                        Сарв
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Gape
                                                                                                                                                                                                                                                                                                                                                                        ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ö
                                                                                                                                                                                                                                                                                                            0.3%; Score 16.8; DB 1; Length 21; 90.0%; Pred. No. 2.7e+02; tive 0; Mismatches 2; Indel8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Score 16.8; DB 1; Length 21;
Pred. No. 2.7e+02;
0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           98
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Matrix metalloproteinase 2; MMP-2; human; transcription; cis-acting element; transcription factor; PCR; primer; se
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Sequence 21 BP; 10 A; 6 C; 3 G; 2 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                            Sequence 21 BP; 7 A; 3 C; 5 G; 6 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Matrix metalloproteinase 2 sense PCR primer.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        (ADRE-) ADVANCED RES & TECHNOLOGY INST.
                                                                                                                                                                                                                                                                                                                                                                                                                     3576 TGAACACTCACTTTTTGCAA 3595
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Example 4; Page 36; 78pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      rgaacacrcagrcrrrgcaa 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Bb
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     17-OCT-2001; 2001US-0329961P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    17-OCT-2002; 2002WO-US033579
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          0.3%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               90.06;
                                                                                                                                                                                                              nucleotide polymorphism #22
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ACC57852 standard; DNA; 21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          11-AUG-2003 (first entry)
                                                                                                                                                                                                                                                                                                                                          Best Local Similarity 90.0
Matches 18; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           WPI; 2003-393526/37
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Sun HB;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            WO2003033679-A2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               24-APR-2003.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             18;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Yokota H,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ACC57852;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Query Match
                                                                                                                                                                                                                                                                                                                  Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      RESULT 381
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ACC57852
        88888888888
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 셤
                                                                                                                                                                                                                                                                                                                                                                                                                        ઠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                ö
                        The invention describes a new antisense compound, having a sequence comprising 8-30 bp targeted to a nucleic acid encoding endothelial specific molecule-1 (ESM-1), that specifically hybridises with the nucleic acid ESM-1 and inhibits its expression. Also described are: a composition; inhibiting the expression of ESM-1 in cells or tissues; and treating an animal having a disease or condition associated with ESM-1. The compound is useful for preparing a composition for treating diabetes, cancer, ischaemia or reperfusion injury, or angiogenic, immunological, earlievascular or neurological disorder. This sequence represents an antisense oligonucleotide that can be used to modulate expression of endothelial specific molecule-1 (ESM-1).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 The invention relates to polymorphic nucleic acid sequences encoding the very low density lipoprotein receptor (VLDLr) and methods of analysing a nucleic acid sample for polymorphisms. This method comprises obtaining a nucleic acid sample from one or more individuals, and determining the nucleic acid sample from or more of the polymorphic sites of one or more nucleic acid molecules. The method is useful for predicting the presence,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Very Low Density Lipoprotein Receptor; VLDLr; cardiovascular disease; single nucleotide polymorphism; SNP; coronary heart disease; forensic; paternity testing; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                   Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      or
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Polymorphic nucleic acid sequences encoding the very low density integrates receptor, useful for predicting the presence, absence on severity of a particular phenotype or disorder, e.g. cardiovascular disease such as coronary heart disease.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          /*tag= a
/standard_name= "Single nucleotide polymorphism"
                                                                                                                                                                                                                                                                                                                                                                                                                                                ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Hudson TJ
                                                                                                                                                                                                                                                                                                                                                                                          0.3%; Score 16.8; DB 1; Length 20; 90.0%; Pred. No. 2.7e+02; tive 0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Gaudet D,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Morgan K,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Claim 1; Page 34; 44pp; English.
```

2 GCTATGTATTGGTACAAGCA 21

BP.

ADQ90421 standard; DNA; 21

ð

```
New set of nucleic amplification primers comprising a forward primer and a reverse primer and capable of amplifying a rearrangement, useful in diagnosing lymphoproliferative disorders.
                                                                                                                                                                                                                                                     nucleic acid amplification; primer; PCR; detection; chromosome aberration; lymphoproliferative disorder; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Van Dongen JJW, Langerak AW, Schuuring EMD, San Miquel JF;
Garzia Sanz R, Parreira A, Smith JL, Lavender FL, Morgan GJ;
Evans PAS, Kneba M, Hummel M, Macintyre EA, Bastard C;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             sequence is used in an example from the present invention.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Sequence 21 BP; 6 A; 4 C; 5 G; 6 T; 0 U; 0 Other;
                                                                                                                                                                                                                         TCRB tubes A and B Vbeta family primer Vbeta7.
3078 ACAAGAACCAGATGACAAAC 3097
                           2 ACAAGAACCAGATCACATAC 21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Claim 6; Fig 7B; 121pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            (UYRO-) UNIV ROTTERDAM ERASMUS.
(DAVI/) DAVI F B L.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             11-OCT-2002; 2002US-0417779P.
                                                                                                                      ADM94102 standard; DNA; 21 BP
                                                                                                                                                                                                                                                                                                                                                                                                                                         13-OCT-2003; 2003WO-NL000690.
                                                                                                                                                                                             (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     WPI; 2004-364878/34.
                                                                                                                                                                                                                                                                                                                                                                      WO2004033728-A2.
                                                                                                                                                                                             15-JUL-2004
                                                                                                                                                                                                                                                                                                                                                                                                            22-APR-2004
                                                                                                                                                                                                                                                                                                                                       Synthetic.
                                                                                                                                                              ADM94102;
                                                                                         RESULT 382
```

```
The invention describes an animal model for identifying agents which alleviate the symptoms of, treat, reduce the severity of, or prevent preclampsia comprising a pregnant borderline hypertensive (BPH/5) mouse, preclampsia comprising a pregnant borderline hypertensive (BPH/5) mouse, and an agent suspected to alleviate the symptoms of, treat, reduce the ceverity of or prevent preclampsia which has been introduced to the mouse. Also described are: a method for screening for compounds useful for the treatment or amelioration or alleviation of preclampsia and/or the symptoms; a method of detecting placental abnormalities in an animal suffering from preclampsia, and an animal anotanisties in an animal suffering from preclampsia, and an animal abnormalities in an animal suffering from preclampsia, and an animal model is useful for understanding preclampsia, and would hold creat potential for design and implementation of effective prevention and great potential for design and implementation of effective prevention and treatment. The animal model is useful for identifying nucleic acid sequences, i.e., genes, and/or amino acid sequences that are associated with preclampsia and its development, especially those that up- or downtrequence, i.e., genes, and/or amino acid sequences that are associated outled administration to the patient having the disease, and can aid in actual administration to the patient having the disease, and can aid in the prognosis of a patient. The animal model is useful for therming the pathology. This sequence represents a mouse vascular endothelial growth factor (VEGF) PCR primer used in real time PCR to compare placental gene engage of the progness and secular endothelial gene engage.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    New animal model comprising a pregnant borderline hypertensive (BPH/5) mouse and an agent introduced to the mouse, useful for identifying agents which alleviate the symptoms of, treat, reduce the severity of, or
                                                                                                                        gynaecological; animal model; preeclampsia; pregrant borderline hypertensive mouse; placental abnormality; surrogate patient; prognosis; preclinical testing; placental abnormality; surrogate patient; prognosis; preclinical testing; placental pathology; mouse; VEGF; vascular endothelial growth factor; PCR; primer; real time PCR; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Sequence 21 BP; 5 A; 6 C; 5 G; 5 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Example 2; SEQ ID NO 12; 25pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                         19-SEP-2003; 2003US-00666980
                                                                                                                                                                                                                                                                                                                                                                                                                                                    19-SEP-2002; 2002US-0411992P
                                                            (first entry)
                                                                                                     Mouse VEGF reverse primer.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                (DAVI/) DAVISSON R L.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     prevent preeclampsia.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      WPI; 2004-517058/49.
                                                                                                                                                                                                                                                                                                                          US2004133929-A1.
                                                                                                                                                                                                                                                                                Mus musculus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Davisson RL;
                                                                                                                                                                                                                                                                                                                                                                    08-JUL-2004.
                                                            23-SEP-2004
                    ADQ90421;
```

ö

Gaps

; 0

0.3%; Score 16.8; DB 1; Length 21; 90.0%; Pred. No. 2.7e+02; trive 0; Mismatches 2; Indels

Query Match

Best Local Similarity 90.0
Matches 18; Conservative

4032 GCTCTGCATTGGTACAAGCA 4051

```
The present invention describes a new composition comprising an isolated projective for modified Bacillus thuringiensis crystal proteins (CrylC). The polypeptide for modified Bacillus thuringiensis crystal proteins (CrylC). The polypeptide of the composition is toxic to an insect cell and comprise within an insecticidal formulation can be used as a plant protective spray which is toxic to caterpillars, beetles and mosquitoes. The polypeptide of the composition may be used to kill an insect through ingestion of the composition may be used to kill an insect through with the composition or a transgenic plant that expresses the polypeptide composition. The insecticidal proteins produced by B. thuringiensis are harmless to plants and other non-targeted organisms but toxic to their specific target insect. The polypeptides have improved toxicity so a reduced amount of bioinsecticide per unit area of treated crop can be used allowing economic and efficient utilization in the field. The
                                                                                                                                                                                                                                                                                                                                                     New modified delta-endotoxin crystal proteins from Bacillus thuringiensis
     Bacillus thuringiensis; delta-endotoxin; insecticide; crystal protein;
                      lepidopteran insect, CrylC, genetic engineering, mutagenesis; mutant, caterpillar, beetle, mosquito, toxic, modification, PCR primer, ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Bacillus thuringiensis, CrylC; crystal protein; insecticide; insect; delta-endotoxin; lepidopteran; modification; genetic engineering; resistance; mutant; mutagenesis; PCR primer; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             B. thuringiensis crystal gene PCR mutagenesis primer SEQ ID NO:52
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      present sequence represents a PCR mutagenesis primer for the B. thuringiensis CrylC crystal protein
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       0.3%; Score 16.8; DB 1; Length 22; 0.0%; Pred. No. 2.8e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Sequence 22 BP; 4 A; 7 C; 8 G; 3 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                        are useful in insecticidal compositions.
                                                                                                                                                                                                                                                                                                                                                                                                       Example 3; Col 71; 144pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              GGATCCCTCGAGCTGCAGGA 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1 GGATCCCCCGGGCTGCAGGA 20
                                                                                                                                                                                                                                                                                       Gilmer AJ;
                                                                                                                                                                                     97US-00980071.
                                                                                                                                                                                                                     96US-00757536
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       90.06
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AAA08162 standard; DNA; 22
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           27-JUN-2000 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Query Match
Best Local Similarity 90.0°
Matches 18; Conservative
                                                                   Synthetic.
Bacillus thuringiensis.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Bacillus thuringiensis
                                                                                                                                                                                                                                                                                     Baum JA,
                                                                                                                                                                                                                                                                                                                    WPI; 1999-370510/31.
                                                                                                                                                                                                                                                      (ECOG-) ECOGEN INC
                                                                                                                                                                                                                     27-NOV-1996;
                                                                                                                                                                                     26-NOV-1997;
                                                                                                                     US5914318-A
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              US6033874-A
                                                                                                                                                    22-JUN-1999
                                                                                                                                                                                                                                                                                       Mettus AL,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Synthetic.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AAA08162;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            RESULT 386
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ö
                    ö
                                                                                                                                                                                                                                                                                                 Mutant, CrylC delta-endotoxin, CrylC.579; insecticidal activity; control; insect; Lepidoptera; Spodoptera exigua; Plutella xylostella; Trichoplusia ni; Spodoptera frugiperda; PCR primer; 89.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      PCR primers AAV27859-60 were used in the course of the invention to create mutants of the CrylC delta-endotoxin of Bacillus thuringiensis. The mutant proteins show insecticidal activity, and can be sprayed onto plants or expressed in transgenic plants for the control of insects, particularly Lepidopteran pests such as Spodoptera exigua, Plutella xylostella, Trichoplusia ni and Spodoptera frugiperda
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   New Bacillus thuringiensis nucleic acid segments - comprising delta-
endotoxin gene fragments, used for the control of insects, particularly
Lepidopteran pests.
                      Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Gaps

    B. thuringlensis crystal protein Cry1C PCR mutagenesis primer H.

                                                                                                                                                                                                                                                                    PCR primer H used to create the Cry1C mutants of the invention.
                    ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Query Match 0.3%; Score 16.8; DB 1; Length 22; Best Local Similarity 90.0%; Pred. No. 2.8e+02; Matches 18; Conservative 0; Mismatches 2; Indels
 90.0%; Pred. No. 2.7e+02; ive 0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Sequence 22 BP; 4 A; 7 C; 8 G; 3 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Example 3; Page 98; 270pp; English.
                                                   4591 CAGGGCTTCATCGTAACTGC 4610
                                                                        1 CAGGGCTTCATCGTTACAGC 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1 GGATCCCCGGGCTGCAGGA 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           GGATCCCTCGAGCTGCAGGA 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Mettus A;
                                                                                                                                                                     Вb
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AAX80013 standard; DNA; 22 BP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       96US-00757536.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      97WO-US022181
                                                                                                                                                                   AAV27859 standard; DNA; 22
                                                                                                                                                                                                                                   (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             (first entry)
                  18; Conservative
                                                                                                                                                                                                                                                                                                                                                                     Synthetic.
Bacillus thuringiensis.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Gilmer AJ,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      WPI; 1998-322660/28
Best Local Similarity
Matches 18; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      (ECOG-) ECOGEN INC.
                                                                                                                                                                                                                                                                                                                                                                                                                     WO9823641-A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     26-NOV-1997,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       27-NOV-1996;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             12-AUG-1999
                                                                                                                                                                                                                                   30-SEP-1998
                                                                                                                                                                                                                                                                                                                                                                                                                                                      04-JUN-1998
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Baum JA,
                                                                                                                                                                                                  AAV27859;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AAX80013;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           RESULT 385
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AAX80013
ID AAX8
XX AAX8
XX II2-A
XX XX XX
                                                                                                                                                                     ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       셤
                                                   ઠે
                                                                                 요
```

Сарв

Gaps

18-MAY-1999; 27-NOV-1996; 26-NOV-1997;

Mettus AL,

activity.

07-MAR-2000.

```
The invention relates to an isolated CrylCa* delta-endotoxin polypeptide useful as an insecticide. Cry is a crystal protein from B. thuringiensis. The isolated CrylCa* delta-endotoxin polypeptide comprises: (a) one or more amino acid mutations in the loop regions between alpha helices 4 and 5 of domain 1; (b) one or more amino acid mutations in the loop regions between alpha helices 6 and 7 of domain 1; or (c) has improved activity against Lepidopteran insects relative to a native CrylCa* delta-endotoxin polypeptide is useful as an polypeptide. The CrylCa* delta-endotoxin polypeptide is useful as an insecticide, particularly for killing Lepidopteran insects or insect cells. The present sequence is a mutagenic PCR primer used to produce a mutant CrylC protein of the invention
                                                                                                   The present invention relates to novel transgenic plants comprising Cryl delta-endotoxin genes, in particular crylC genes that encode modified crystal proteins having improved resistance to Lepidopteran insects. The plants that express the mutated CrylC delta-endotoxin crystal proteins are monocotyledonous (corn, wheat, oat, rice, barley, turf grass, pasture grass) or dicotyledonous (legume, soybean, cotton, fruit, berry, tree). The present sequence is a PCR primer which is used for mutagenesis of Bacillus thuringiensis CRYIC DNA. This sequence is used in the exemplification of the invention
Transgenic plants, comprises nucleic acid encoding CrylC delta-endotoxin polypeptide, has improved resistance to Lepidopteran insects.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CRYIC; ss; delta-endotoxin; insecticide; PCR; primer;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             New delta endotoxin polypeptides, which are Lepidopteran-toxic polypeptides, useful as an insecticide, particularly for killing Lepidopteran insects or insect cells.
                                                                                                                                                                                                                                                                                                                                                                                                                             .
0
                                                                                                                                                                                                                                                                                                                                                                          0.3%; Score 16.8; DB 1; Length 22; 90.0%; Pred. No. 2.8e+02; tive 0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            B. thuringiensis crystal protein CrylC PCR primer H.
                                                                                                                                                                                                                                                                                                                                     Sequence 22 BP; 4 A; 7 C; 8 G; 3 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               lepidopteran insect; mutagenic primer.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Example 3; Col 70; 149pp; English.
                                                                          Example 3; Col 235; 151pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1 GGATCCCCCGGGCTGCAGGA 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   GGATCCCTCGAGCTGCAGGA 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      (MONS ) MONSANTO TECHNOLOGY LLC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       96US-00757536.
97US-00980071.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           99US-00337280.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ABS70799 standard; DNA; 22
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                    18; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Bacillus thuringiensis.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Baum JA, Gilmer AJ,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               WPI; 2002-705183/76.
                                                                                                                                                                                                                                                                                                                                                                                             Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Crystal protein;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          27-NOV-1996;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           26-NOV-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                22-JUN-1999;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 26-NOV-1997;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          US6423828-B1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      23-JUL-2002.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ABS70799;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           RESULT 388
                                                                                                                                                                                                                                                                                                                                                                                                                                         Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ABS70799
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        a
                  ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ö
                                                                                                                                                                                                                                                                                                                                                                                                                                    The present invention describes isolated Bacillus thuringiensis CrylC delta-endotoxin polypeptides having: (i) at least one amino acid (aa) mutation in the loop region between alpha-helices 6 and 7 of domain 1; and (ii) better activity against Lepidoptera than the native CrylC. The polypeptides, possibly after activity in the digestive tract of insects, kills insect cells by formation of pores and disturbing cellular homeostasis. The polypeptides are used to control lepidopteran psets on homeostasis. (i) applied as a composition; or (ii) expressed in plants from heterologous nucleic acid (generating insect-resistant plants). They are more active against Lepidoptera than native CrylC. AAA08144 to
                                                                                                                                                                                                                                                                                                         New mutant Bacillus thuringiensis endotoxin, used for controlling lepidopteran pests, has mutated loop region to impart higher insecticidal
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Cryl protein; delta-endotoxin; insect resistance; lepidopteran insect; transgenic plant; transgenic; PCR; primer; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          0.3%; Score 16.8; DB 1; Length 22; 90.0%; Pred. No. 2.8e+02; ative 0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Sequence 22 BP; 4 A; 7 C; 8 G; 3 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         PCR primer H used for mutagenesis of CRY1C DNA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               exemplification of the present invention
                                                                                                                                                                                                                                                                                                                                                                                                        Example 3; Col 71; 153pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     GGATCCCTCGAGCTGCAGGA 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1 GGATCCCCCGGGCTGCAGGA 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    (MONS ) MONSANTO TECHNOLOGY LLC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Mettus AL;
                                                                                                                                                                                                                               Baum JA, Gilmer AJ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              BP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     96US-00757536.
97US-00980071.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           99US-00337635
                                                                                                                    96US-00757536
97US-00980071
                                                                          99US-00314093
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AAD44228 standard; DNA; 22
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      13-DEC-2002 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Query Match 0.33
Best Local Similarity 90.03
Matches 18; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Baum JA, Gilmer AJ,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          WPI; 2002-033341/04
                                                                                                                                                                                                                                                                           WPI; 2000-255697/22
                                                                                                                                                                                     (ECOG-) ECOGEN INC.
```

21-JUN-1999; 27-NOV-1996;

26-NOV-1997;

Unidentified

AAD44228;

RESULT 387

ò 셤 US6313378-B1 06-NOV-2001.

XX PX X B X B X X B

```
WPI; 2003-844482/78
                                                                                      US2003195336-A1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                WO2003034072-A2
                                                                                                                                             27-NOV-1996;
26-NOV-1997;
                                                                                                                                                                 22-JUN-1999;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             29-SEP-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                PCR primer;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   24-APR-2003.
                                                                                                        16-OCT-2003
                                         primer; ss.
                                                                   Synthetic.
                                                                                                                                                                                                                                                                           or fruits.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Synthetic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ACF42669;
                                                                                                                                                                                                       Baum JA,
                                                                                                                                                                                                                                                                                                                                                                                                              Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                           Best Loca
Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    RESULT 391
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ACF42669
  g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ઠે
                                                ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              The invention relates to a nucleic acid segment comprising a delta-
endotoxin gene encoding a Cryl crystal protein. The nucleic acid segment
is useful for a recombinant expression method to prepare a recombinant
polypeptide useful as bioinsecticides. The present sequence is a PCR
primer used to amplify Crylc DNA
                                                                                                                                                                                                                Delta-endotoxin gene; Cryl crystal protein; bioinsecticide; transgenic;
                                                                                                                                                                                                                                                                                                                                                                                                                     New nucleic acid segment comprising a delta-endotoxin gene encoding a Cryl crystal protein, useful for a recombinant expression method to prepare a recombinant polypeptide useful as bioinsecticide.
                                               Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Gaps
                                               ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ö
                           Query Match

0.3%; Score 16.8; DB 1; Length 22;
Best Local Similarity 90.0%; Pred. No. 2.8e+02;
Matches 18; Conservative 0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           'Match 0.3%; Score 16.8; DB 1; Length 22; Local Similarity 90.0%; Pred. No. 2.8e+02; Heb 18; Conservative 0; Mismatches 2; Indels
          BP; 4 A; 7 C; 8 G; 3 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Sequence 22 BP; 4 A; 7 C; 8 G; 3 T; 0 U; 0 Other;
                                                                                                                                                                                             PCR primer H used to amplify CrylC DNA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                             Example 3; Page 39; 151pp; English
                                                                  1 GGATCCCCCGGGCTGCAGGA 20
                                                                                    1 GGATCCCTCGAGCTGCAGGA 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1 GGATCCCCCGGGCTGCAGGA 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     GGATCCCTCGAGCTGCAGGA 20
                                                                                                                                                                                                                                                                                                                                                                                  Baum JA, Gilmer AJ, Mettus AL;
                                                                                                                                                                                                                                                                                                                                                              (MONS ) MONSANTO TECHNOLOGY LLC.
                                                                                                                                    ВР
                                                                                                                                                                                                                                                                                                                                 97US-00980071.
99US-00337635.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     BP
                                                                                                                                                                                                                                                                                                                       96US-00757536.
                                                                                                                                                                                                                                                                                                     05-OCT-2001; 2001US-00972175.
                                                                                                                                    AAD59856 standard; DNA; 22
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AAD64016 standard; DNA; 22
                                                                                                                                                                          (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                    WPI; 2003-616557/58
                                                                                                                                                                                                                                                               US2003101482-A1.
                                                                                                                                                                                                                         PCR; primer; ss.
                                                                                                                                                                                                                                          Unidentified
                                                                                                                                                                                                                                                                                                                       27-NOV-1996;
                                                                                                                                                                                                                                                                                                                                 26-NOV-1997;
21-JUN-1999;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           12-FEB-2004
          Sequence 22
                                                                                                                                                                          18-DEC-2003
                                                                                                                                                                                                                                                                                  29-MAY-2003
                                                                                                                                                      AAD59856;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AAD64016;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Query Match
                                                                                                                  RESULT 389
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  RESULT 390
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Matches
                                                                                                                            AAD59856
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AAD64016
                                                                  ð
                                                                                   g
                                                                                                                                    요
XS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ઠ
```

```
ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              New nucleic acid comprising delta-endotoxin gene encoding lepidopterantoxic polypeptides, useful in preparing recombinant polypeptides and as probes for nucleic acid hybridization or as insecticides e.g. filed crops
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Human, ALMS1; chromosome 2, 2p13; Alstrom disease; retinal dystrophy; cardiomyopathy; endocrinopathy; diabetes; Alstrom syndrome; cardiant; ophthalmological; antidiabetic; hepatotropic; nephrotropic; gene therapy;
                                                                            Delta-endotoxin; crystal protein; CrylC; insecticide; lepidopteran; PCR;
PCR primer H used to generate Bacillus thuringiensis CRYIC mutant gene.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            The invention relates to synthetically modified Bacillus thuringiensis Cryl delta-endoroxin genes in particular crylc genes encoding modified crystal proteins having improved insecticidal activity against crystal proteins having improved insecticidal activity against lepidopterans. The invention is useful as insecticides for topical and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             /or systemic application to field crops, grasses, fruits or vegetables and ornamental plants. The present sequence is a PCR primer used to generate Bacillus thuringiensis CRYIC mutant crystal protein gene
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Gapa
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        .
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   0.3%; Score 16.8; DB 1; Length 22; 90.0%; Pred. No. 2.8e+02; tive 0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Sequence 22 BP; 4 A; 7 C; 8 G; 3 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Example 3; Page 39; Opp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1 GGATCCCCCGGGCTGCAGGA 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                GGATCCCTCGAGCTGCAGGA 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                (MONS ) MONSANTO TECHNOLOGY LLC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Mettus AL;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           96US-00757536.
97US-00980071.
99US-00337280.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          BP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Human ALMS1 PCR primer Ex7mR.
                                                                                                                                                                                                                                                                                                                                                                                                                                                               22-JUL-2002; 2002US-00200522.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ACF42669 standard; DNA; 22
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Local Similarity 90.0
nes 18; Conservative
                                                                                                                                                                                     Bacillus thuringiensis
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Gilmer AJ,
```

```
L5-AUG-2002; 2002NZ-00520797.
                                      KIM J.
SCHMIDT-KUNTZEL
                                                           CORNET A.
                                                                                                                                                  FARNIR F.
                          BLOTT S.
                                                                                                                                                                                                                                        SNELL R.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         29-JUL-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AD016768;
                                                                                                                                                                                                               (SPEL/)
(FORD/)
                                                                                                                                                                                                                                         SNEL/)
                          BLOT/)
                                                                                                                                                                                                     ( NHOP)
                                                                                                                                                  (FARN/)
                                                (SCHM/)
                                                                                     (CAMB/)
                                                                                                            (KARI)
                                                                                                                                                                                          VILK/
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  RESULT 393
                                                                                                                             SIMO/
                                                                                                                                                                           MOIS/
                                                                           BERZ/
                                                                                                    (GRIS/
                                                                                                                                       GEOR/
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AD016768/
   *****
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       8
                                                                                                                                                                                                                                                             The present invention describes a method of diagnosing the presence of, or susceptibility to, retinal dystrophy, cardiomyopathy, endocrinopathy, cor susceptibility to, retinal dystrophy, cardiomyopathy, endocrinopathy, diabetes, or Alstrom syndrome in an individual. The method comprises cregion of the individual, or detecting aberrant ALMS1 sorting in a sample from the individual, or detecting aberrant ALMS1 activity. Human capability or capability to 2ph3. ALMS1 has ophthalmological, cardiant, antidiabetic, hepatocropic and nephrotropic activities, and can be used in gene therapy. The method is useful for activities, and can be used in gene therapy. The method is useful for cardiomyopathy, endocrinopathy (e.g. liver disease or renal impairment), cardiomyopathy, endocrinopathy (e.g. liver disease or renal impairment), cused in an agent that prevents or treats retinal dystrophy, cardiomyopathy, endocrinopathy or diabetes is useful in manufacturing a cardiomyopathy, endocrinopathy or diabetes is useful in manufacturing a cardiomyopathy, endocrinopathy or diabetes is useful in manufacturing a cardiomyopathy, endocrinopathy or diabetes. Cc medicament for treating apatient who has been diagnosed as having or diabetes. ACF42632 to ACF42747 and ABR82113 to ABR82118 represent invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ö
                                                                                                                                                                            Diagnosing the presence of, or susceptibility to, retinal dystrophy, cardiomyopathy, endocrinopathy, diabetes, or Alstrom syndrome in an individual, comprises detection or modulation of the ALMS1 protein or
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            GHR; growth hormone receptor; genotypic; bovine; polymorphism; milk production; milk protein; milk fat; PCR; primer; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Query Match 0.3%; Score 16.8; DB 1; Length 22; Best Local Similarity 90.0%; Pred. No. 2.8e+02; Matches 18; Conservative 0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Sequence 22 BP; 2 A; 5 C; 6 G; 9 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Bovine GHR exon amplifying primer GHRex3_R.
                                                                                                                                                                                                                                                Disclosure, Page 39; 121pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          3911 CCACTGTGAATGGCTCTCTG 3930
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        2 CCTCTGTGAATGGCTGTCTG 21
                                                                                                                                 Wilson DI, Hearn T, Walker M;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         16-AUG-2002; 2002WO-NZ000157.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 05-JUN-2002; 2002NZ-00519372.
                                            2001GB-00025318.
2002GB-00000248.
2002GB-00003039.
2002GB-00003040.
         15-OCT-2002; 2002WO-GB004658
                                  2001GB-00024621
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ADI04018 standard; DNA; 22
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                15-APR-2004 (first entry)
                                                                                                          (UYSO-) UNIV SOUTHAMPTON.
                                                                                                                                                          WPI; 2003-393556/37
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           WO2003104492-A1.
                                               22-OCT-2001;
07-JAN-2002;
08-FEB-2002;
08-FEB-2002;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   18-DEC-2003
                                                                                                                                                                                                                        gene region.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Bos taurus.
Synthetic.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ADI04018;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ð
```

```
The invention relates to determining genetic merit of a bovine with respect to milk composition and volume and involves determining the GHR crespect to milk composition and volume and involves determining the GHR growth hormone receptor) genotypic state of the bovine. The genotypic state is determined by the presence of at least one nucleotide difference from the nucleotide sequence, genomic and cDNA encompassing the bovine GHR gene selected from AD103978-AD103981, or by the presence of one or GHR gene polymorphisms comprising Nr 7185 (del 1), Nr 71-12 (T-C), Nr 864-33 (T-G), Nr 934-21 (A-G), Nr 1922 (C-T), Nr 1055 (C-T), Nr 1635 (C-T), Nr 1646-33 (T-G), Nr 934-51 (A-G), Nr 1922 (C-T), Nr 1583 (Nr 164) (T-C), Nr 164-33 (T-G), Nr 1922 (C-T), Nr 1583 (Nr 164) (T-C), Nr 164-33 (T-G), Nr 1922 (C-T), Nr 1583 (Nr 164) (T-C), Nr 164-33 (T-G), Nr 1922 (C-T), Nr 1583 (Nr 164) (T-C), Nr 164-33 (T-G), Nr 1922 (C-T), Nr 168-61 (T-C), Nr 164-33 (T-G), Nr 1922 (C-T), Nr 168-61 (T-C), Nr 164-33 (T-G), Nr 1922 (C-T), Nr 168-61 (T-C), Nr 164-33 (T-G), Nr 1922 (C-T), Nr 168-61 (T-C), Nr 164-33 (T-G), Nr 1922 (C-T), Nr 168-61 (T-C), Nr 164-33 (T-G), Nr 1922 (T-G), Nr 1923 (Nr 164-31) (T-C), Nr 164-33 (T-G), Nr 1922 (T-G), Nr 198-3 (Nr 164-31) (T-C), Nr 164-33 (T-G), Nr 1922 (T-G), Nr 198-3 (Nr 164-31) (T-C), Nr 164-33 (T-G), Nr 1922 (T-G), Nr 198-3 (Nr 164-31) (T-C), Nr 164-33 (T-G), Nr 198-3 (T-G), Nr 198-3 (Nr 164-31) (T-C), Nr 164-33 (T-G), Nr 198-3 (T-G), Nr 19
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Determining genetic merit of a bovine with respect to milk composition and volume comprises determining the GHR genotypic state of the bovine
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Cornet A, Berzi P;
mon P, Georges M, Farnir F;
Tohnson D, Spelman R, Ford C;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     4 synthesis-period of neuroblastoma related primer, SEQ ID 1030.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Human; 4 synthesis-period; neuroblastoma; stage 48; primer; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 .
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            0.3%; Score 16.8; DB 1; Length 22; 90.0%; Pred. No. 2.8e+02; tive 0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Sequence 22 BP; 7 A; 3 C; 7 G; 5 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Blott S, Kim J, Schmidt-Kuntzel A, Cornet A, Cambisano N, Grisart B, Karim L, Simon P, Ge Coppieters W, Moisio S, Vilkki J, Johnson D, Snell R;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Example; SEQ ID NO 41; 74pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           3270 TITGICAACTICITCACAGG 3289
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    GHR exons from bovine genomic DNA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             22 TTTGTCAACTTCTCCACAAG 3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ADO16768 standard; DNA; 22
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Query Match 0.3
Best Local Similarity 90.0
Matches 18; Conservative
Þ
                                                                                                                                                                                                                                                                                                                                                                                                       COPPIETERS W. MOISIO S. VILKKI J.
                                                                                     BERZI P.
CAMBISANO N.
GRISART B.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    WPI; 2004-062378/06.
                                                                                                                                                                                                                      KARIM L.
SIMON P.
GEORGES M.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   JOHNSON D.
SPELMAN R.
FORD C.
```

```
expression and activity, or as a target of gene therapy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       W09912557-A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         18-MAR-1999.
                                                                                                                                                                                                                                                                                                                                                                                                                                              Synthetic
                                                                                                                                                                                                                                                                            AAX33800;
                                                                                                                                                                                                                                        RESULT 395
                                                                                                                                                                                                                                                 AAX33800
#X8X00000000000X8
                                                                                                                                                                                                                                                                            8
                                                                                                                                                                                                           요
                                                                                                                                                                                                                                                                                                                ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Tamechika I;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      human; gene therapy; diagnostic marker; pharmaceutical; ss; PCR; primer.
                                                                                                                                                                                                                                                                                                                Gaps
                                                                                                                                                              Novel nucleic acid obtained from 4 synthesis-period of neuroblastoma cells useful for prognosing and determining progress stage of
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            for
                                                                                                                                                                                                                   The present invention relates to human nucleic acid sequences (I, ADO15739-ADO15912) obtained from 4 synthesis-period (stage 4S) of neuroblastoma cell. (I) is useful for prognosing and determining th progress stage of 4 synthesis-period of neuroblastoma. The present sequence is a primer, used to illustrate the invention.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Otsuki T, Wakamatsu A, Sato H, Ishii S;
Hio Y, Otsuka K, Nagai K, Irie R, Tamecl
Otsuka M, Nagahari K, Masuho Y;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          New polynucleotides and polypeptides are useful in gene therapy, developing a diagnostic marker or medicines for regulating their
                                                                                                                                                                                                                                                                                                                ö
                                                                                                                                                                                                                                                                                            0.3%; Score 16.8; DB 1; Length 22; 90.0%; Pred. No. 2.8e+02; ive 0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                            Sequence 22 BP; 8 A; 9 C; 0 G; 5 T; 0 U; 0 Other;
                                                                                                                                                                                                  Claim 8; SEQ ID NO 1030; 455pp; Japanese.
                                                                                                                                                                                                                                                                                                                                 4620 TGGGATTGTGAAGGTGTGGA 4639
                                                                                                                                                                                                                                                                                                                                                                                                                                                     Human PCR primer SEQ ID NO:4995.
                                                                                                                                                                                                                                                                                                                                                 20 recearrareaacricreca 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  (REAS-) RES ASSOC BIOTECHNOLOGY
                                                                                                 (HISM ) HISAMITSU PHARM CO LTD
                                                                                                                                                                                                                                                                                                                                                                                               ADM06310 standard; DNA; 18 BP
                                                                               30-OCT-2002; 2002JP-00316586.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               12-APR-2002; 2002EP-00008400.
                                                             30-OCT-2003; 2003WO-JP013932
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                22-MAR-2002; 2002JP-00137785.
                                                                                                                                                                                                                                                                                                                                                                                                                                   20-MAY-2004 (first entry)
                                                                                                                                                                                                                                                                                       Query Match
Best Local Similarity 90.0
                                                                                                          (CHIB-) CHIBA PREFECTURE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   , Sugiyama T, (
J, Isono Y, H. Yoshikawa T, O
                                                                                                                           Ohira M;
                                                                                                                                              WPI; 2004-390323/36.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         WPI; 2003-723558/69
                        WO2004039975-A1.
                                                                                                                                                                                 neuroblastomas.
                                                                                                                           Nakagawara A,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           EP1347046-A1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Yamamoto J,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            24-SEP-2003
                                           13-MAY-2004
        Synthetic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Isogai T,
                                                                                                                                                                                                                                                                                                                                                                                                                 ADM06310;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Seki N,
                                                                                                                                                                                                                                                                                                                                                                            ઠે
                                                                                                                                                                                                                                                                                                                                                  셤
```

```
This sequence represents a PCR primer for a S. aureus polynucleotide of the invention. The invention also relates to the polypeptides encoded by the S. aureus polynucleotides. The polypeptides can be used for the treatment or prevention of disease. The polypeptide or polynucleotide can
                                                             The invention relates to a novel human polynucleotide and the encoded polypeptide. A polynucleotide of the invention may have a use in gene therapy. An oligonucleotide of the invention ADM6502-ADM06773 is useful as a primer for synthesizing the polynucleotide or as a probe for detecting the polynucleotide. The polynucleotides ADM01316-ADM03758 are useful in gene therapy, for developing a diagnostic marker or medicines for regulating their expression and activity, or as a target of gene therapy. The proteins ADM03759-ADM06201 encoded by the polynucleotides are useful as pharmaceutical agents. The present sequence represents an oligonucleotide used in the invention.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   S. aureus infection, diagnosis, therapy, central nervous system disorder; upper respiratory tract infection, otitis media; bacterial tracheitis; acute epiglottitis, thyroiditis; empyema; lung abscess; splanta bascess; cardiac infection, infective endocarditis, secretory diarrhoea; ulcer; retroperitoneal abscess; cerbral abscess; blepharitis; conjunctivitis; karatitis; endophthalmitis; preseptal cellulitis; orbital cellulitis; darryoyatitis; ppididymitis; interarenal abscess; perinephric abscess; toxic shock syndrome; impetigo; folliculitis; cutaneous abscess; cellulitis; wound infection; bacterial myositis; septic arthritis; one contemplation of the contemplatic abscess; cellulitis; Helicobacter pylori infection; stomach cancer; gastritis;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     0.3%; Score 16.4; DB 1; Length 18; 94.4%; Pred. No. 2.9e+02; tive 0; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 S. aureus coding sequence PCR primer SEQ ID NO. 31.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   New isolated Staphylococcus aureus polynucleotides.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Sequence 18 BP; 5 A; 8 C; 2 G; 3 T; 0 U; 0 Other;
Example 8; SEQ ID NO 4995; 305pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Warren PV;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Disclosure; Page 83; 102pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     3813 CCATCCTCTACAAAGCAG 3830
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             (SMIK ) SMITHKLINE BEECHAM CORP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1 CCATCCTCTACACAGCAG 18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ВР
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              98WO-US018987.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  97US-0058710P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AAX33800 standard; DNA; 19
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Ouery Match
Best Local Similarity 94.4'
Matches 17; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              25-JUN-1999 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Burnham MKR, Lonetto MA,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Staphylococcus aureus.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    WPI; 1999-229138/19.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             PCR primer; 88
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              14-SEP-1998;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  12-SEP-1997;
```

```
also be used to diagnose diseases related to their expression. The polypeptides and vectors containing them can also be used in immunisation methods. The products can be used for treating infection, e.g. infections of the upper respiratory tract, (e.g. otitis media, bacterial trachetis, contential, products acute epiglottitis, thyroiditis), respiratory (e.g. empyema, lung acute epiglottitis, thyroiditis, respiratory (e.g. empyema, lung secretory diarrhoea, splenic abscess), extroperitioneal abscess), central conjunctivitis, keratitis, endophthalmitis, preseptal and orbital conjunctivitis, intrarenal and perinphric abscess, toxic shock syndrome), epididymitis, intrarenal and perinphric abscess, toxic shock syndrome), skin (e.g. impetigo, folliculitis, cutaneous abscesses, cellulitis, wound infection, bacterial myositis), bone and joint (e.g. septic arthritis, osteomyellitis), or Helicobacter pylori infections, (e.g. causing stomach cancer, ulcers and gastritis). The products can also be used for treating in-dwelling devices and wounds
                                                                                                                                                                                                                                                                                                                                                                                                                 ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 This sequence is a PCR primer used in the cloning of the T66Bk gene. The invention related to a nucleic acid molecule (I) comprising a transcription unit encoding in its 5' portion a kinase having a homology to MARK2 kinase and the 3' portion of the nucleotide sequence has a high homology to rsk3 kinase. Sperm produced by transgenic creatures containing (I) are useful for production of offspring. T66Bk, its regulatory region, recombinant DNA, vectors, host cells, antibodies, etc., are useful for the isolation of receptors on the surface of sperm recognising attractants of the egg cell for the development and/or
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Transcription unit; MARK2 kinase; rsk3 kinase; regulatory region; T66Bk; contraceptive; Responder/Distorter signalling cascade; t-Responder;
                                                                                                                                                                                                                                                                                                                                                                                                                 Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                   ;
0
                                                                                                                                                                                                                                                                                                                                                        O.3%; Score 16.4; DB 1; Length 19; Local Similarity 94.4%; Pred. No. 2.98+02; Les 17; Conservative O; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Nucleic acids involved in the Responder phenotype in mice.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              (PLAC ) MAX PLANCK GES FOERDERUNG WISSENSCHAFTEN
                                                                                                                                                                                                                                                                                                                                      Sequence 19 BP; 4 A; 5 C; 8 G; 2 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               PCR primer for cloning of T66Bk gene.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Koschorz B, Kispert A;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Example 7; Page 59; 117pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                            18 GGAATTCGGCACGAGGGG 35
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1 genarregenecación 18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     98WO-EP007395.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           97EP-00120190
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              98EP-00103596
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AAX76854 standard; DNA; 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           WPI; 1999-347466/29.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            PCR primer; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            WO9925815-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     18-NOV-1998;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           18-NOV-1997;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                02-MAR-1998;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Herrmann B,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               05-AUG-1999
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                27-MAY-1999
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Synthetic.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AAX76854;
                                                                                                                                                                                                                                                                                                                                                                                     Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Mus sp.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           RESULT 396
                                                                                                                                                                                                                                                                                                                                                                                                                           Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AAX76854
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      \%
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  8
```

```
production of contraceptives. They can also be used to identify chemicals or biological compounds able to trigger the (premature) activation or inhibition of the Responder/Discorter signalling cascade, or to identify and isolate receptors and other members of the cascade that bind the expression products. The methods for detecting the sperm of the cansopenic animal, and selecting against (I) also provide a means for distorting the transmission ratio of genetic traits by altering genes of the Responder/Distorter signal cascade other than the t-Responder. They also allow distortion, to a non-Mendelian ratio, of the transmission of a genetic trait, i.e. determination of sex, from male mammals to their cantoved in sperm motility and/or fertilisation. The genes and proteins involved in the responder phenotype and Responder/Distorter signalling cascade, as well as the inventive methods are advantageous in breeding strategies by allowing for specific selection of genetic traits and in particular, of sex
                                                                                                                                                                                                                                                                                                                                 ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   New compounds antisense to nucleic acid encoding human or mouse tumor necrosis factor receptor 2 are useful to treat disease associated with
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Tumour necrosis factor receptor 2; TNPR2; antisense oligonucleotide; phosphorothioate; 2'-O-methoxyethyl; ss.
                                                                                                                                                                                                                                                                                                                                    Gaps
                                                                                                                                                                                                                                                                                                                                   ö
                                                                                                                                                                                                                                                                                                Score 16.4; DB 1; Length 20;
Pred. No. 2.9e+02;
0; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       /note = "2'-0-methoxyethyl nucleotides"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       /mod_base= OTHER
/note= "2'-0-methoxyethyl nucleotides'
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Human TNFR2 antisense oligonucleotide SEQ ID NO:57.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            'note= "phosphorothioate linkages"
                                                                                                                                                                                                                                                                    Sequence 20 BP; 8 A; 5 C; 7 G; 0 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               mod_base= OTHER
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            /mod_base= OTHER
                                                                                                                                                                                                                                                                                                                                                                   3412 CAGCAAAAGCGGGAGCAG 3429
                                                                                                                                                                                                                                                                                                                                                                                                   3 cagcadadecadeadeag 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      27-APR-2001; 2001US-00844634.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                27-APR-2001; 2001US-00844634.
                                                                                                                                                                                                                                                                                                        0.3%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ABQ74807 standard; DNA; 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                /*tag= b
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               บ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            24-OCT-2002 (first entry)
                                                                                                                                                                                                                                                                                                     Query Match
Best Local Similarity 94.4
Matches 17; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            16. .20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               /*tag=
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 (ISIS-) ISIS PHARM INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               /*tag=
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Bennett CF, Watt AT;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            WPI; 2002-606814/65.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   modified base
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 modified base
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                modified base
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          US6410324-B1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         25-JUN-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ABQ74807;
                                                                                                                                                                                                                                                                                                                                                                                                                                                    RESULT 397
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Key
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ABQ74807
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                SSSSSSSSSSSSSSSS
                                                                                                                                                                                                                                                                                                                                                                        ð
                                                                                                                                                                                                                                                                                                                                                                                                    g
```

```
ö
                                                                The present invention describes compounds of 8-30 nucleobases antisense to a nucleic acid encoding human or mouse tumour necrosis factor receptor 2 (TNRR2). Also described is a method for inhibiting expression of human or mouse TNRR2 comprising contacting cells or tissues in vitro with one of the claimed compounds. The antisense compounds are used to treat a disease or condition associated with expression of TNRR2. The present sequence represents a human TNRR2 antisense chimeric phosphorothioate
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Pharmaceutical composition for treating allments associated with impaired respiration, has oligo(s) antisense to specific gene(s) or its corresponding RNAs, and glucocorticoid or non-glucocorticoid steroid or
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   The invention relates to a novel pharmaceutical composition, which has a first active agent comprising an oligonucleotide antisense to the initiation codon, coding region, 5' or 3' end genomic flanking regions, 5' and 3' intron-exon junctions, or regions within 2-10 nucleotides of junctions of genes encoding a polypeptide associated with lung and/or masal alraway dysfunction and a second active agent comprising an antiinflammatory steroid and ubiquinone. A composition of the invention has antiinflammatory, antiallergic, antiasthmatic, hypotensive,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Human; antisense; lung dysfunction; nasal airway dysfunction; antiinflammatory steroid; ubiquinone; antiinflammatory; antiallergic; antisathmatic; hypotensive; immunosuppressive; cycostatic; gene therapy; antisense gene therapy; respiratory; lung; adenosine sensitivity; adenosine receptor; bronchodilation; bronchoconstriction; lung allergy; lung inflammation; respiratory disease; ds.
                                                                                                                                                                                                                                                                                                           Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ä
                                                                                                                                                                                                                                                                                                           .;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Aguilar
                                                                                                                                                                                                                                                                 Score 16.4; DB 1; Length 20;
Pred. No. 2.9e+02;
0; Mismatches 1; Indels
                                                                                                                                                                                                 oligonucleotide, which is given in the present invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Katz E, Pabalan J,
 necrosis factor receptor 2 expression.
                                                                                                                                                                                                                                   Sequence 20 BP; 3 A; 7 C; 6 G; 4 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Claim 15; SEQ ID NO 970; 872pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Li Y, Sandrasagra A, Ka
Tang L, Shahabuddin S;
                                                                                                                                                                                                                                                                                                                                               4123
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Human oligonucleotide sequence.
                                 Claim 3; Col 47; 69pp; English.
                                                                                                                                                                                                                                                                                                                                                                               18
                                                                                                                                                                                                                                                                                                                                                                                                                                                        728/c
ABZ85728 standard; DNA; 20 BP.
                                                                                                                                                                                                                                                                       0.3%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            23-APR-2002; 2002WO-US013135.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              24-APR-2001; 2001US-0286137P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  (EPIG-) EPIGENESIS PHARM INC
                                                                                                                                                                                                                                                                                                                                             4106 GTCATCCTTCCAGGGCTC
                                                                                                                                                                                                                                                                                                                                                                               1 grcarccreccaeecrc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               (first entry)
                                                                                                                                                                                                                                                                                                         17; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          WPI; 2003-229219/22.
                                                                                                                                                                                                                                                                                        Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    WO200285308-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   sapiens
   tumor
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               17-0CT-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        31-OCT-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ubiquinone.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Miller S,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ABZ85728;
                                                                                                                                                                                                                                                                       Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Nyce JW,
   топве
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Ношо
                                                                                                                                                                                                                                                                                                         Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                      8
                                                                                                                                                                                                                                                                                                                                                                           셤
```

```
ö
                                                                      antinflammatory steroid in a subject, for reducing or depleting levels of, or reducing sensitivity to adenosine, reducing levels of adenosine receptor, producing bronchodilation, increasing levels of ubiquinone or lung surfactant in a subject's tissue, or treating bronchoconstruction, lung inflammation, lung allergies, or a respiratory disease or condition. Note: The sequence data for this patent is not represented in the printed specification, but was obtained in electronic format directly from WIPO
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Human; antisense; bronchoconstriction, allergy; hyposecretion; pain; respiratory tract inflammation; adenosine sensitivity; lung; cancer; surfactant depletion; antiallergic, antiinflammatory; antiasthmatic; analgesic; hypotensive; immunosuppressive; cycostatic; cystic fibrosis; beta-adrenergic agonist; respiratory disease; pulmonary vasoconstriction; respiratory districtions and respiratory districtive beta-adrenergic obstructive pulmonary disease; pulmonary hypertension; emphysema; chronic obstructive pulmonary disease; cancer; bronchitis; pulmonary transplantation rejection; ss; primer.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                comprising oligonuclectides, effective for alleviating bronchoconstriction, respiratory tract inflammation, allergies and bronchoconstriction, respiratory levels of adenosine (A) or (A) receptors, surfactant depletion or hyposecretion, when administered to a mammal. The oligonuclectides are derived from a gene encoding or regulating
immunosuppressive, and cytostatic activity. The composition may have a mee in antisense gene therapy. The composition is useful for treating or preventing a respiratory, lung or malignant disease or condition, also for enhancing the prophylactic or therapeutic respiratory effect of an
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  This invention describes a novel composition (a) a first active agent
                                                                                                                                                                                                                                                                                                                                         Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ç
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Pharmaceutical composition for treating asthma, has antisense oligonuclectide containing less percentage of adenosine, targeted nucleic acids associated with lung airway or lung dysfunction, and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ä
                                                                                                                                                                                                                                                                                                                                         ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Aguilar
                                                                                                                                                                                                                                                                                                   Length 20;
                                                                                                                                                                                                                                                                                                                                       1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Pabalan J,
                                                                                                                                                                                                                                                          Sequence 20 BP; 4 A; 2 C; 7 G; 7 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                             Score 16.4; DB 1;
Pred. No. 2.9e+02;
0; Mismatches 1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Human stanniocalcin-derived oligo SEQ ID 970.
                                                                                                                                                                                                                 at ftp.wipo.int/pub/published_pct_sequences
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Katz E,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Claim 15; SEQ ID NO 970; 763pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        i Y, Sandrasagra A, Ka
Tang L, Shahabuddin S;
                                                                                                                                                                                                                                                                                                                                                                              2143
                                                                                                                                                                                                                                                                                                                                                                                                                   6
                                                                                                                                                                                                                                                                                               0.3%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    23-APR-2002; 2002WO-US013143.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   (EPIG-) EPIGENESIS PHARM INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           24-APR-2001; 2001US-0286036P.
                                                                                                                                                                                                                                                                                                                                                                              2126 CACATCCAAATGGAAATT
                                                                                                                                                                                                                                                                                                                                                                                                                     CACATCCAACTGGAAATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ABD21958 standard; DNA; 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   (first entry)
                                                                                                                                                                                                                                                                                                                  Local Similarity 94.4 es 17; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 bronchodilating agent
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    WPI; 2003-093058/08.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       WO200285309-A2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Z
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   29-JUL-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               31-OCT-2002.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Nyce JW, L
Miller S,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ABD21958;
                                                                                                                                                                                                                                                                                               Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                   20
                                                                                                                                                                                                                                                                                                                                         Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               RESULT 399
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ABD21958/
88888888888888888888
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       셤
                                                                                                                                                                                                                                                                                                                                                                                ઠ
```

expression of a target polypeptide associated with lung airway or lung dysfunction or cancer and can be anti-sense to the corresponding mRNA.

The invention also describes a kit, that comprises: (a) a delivery device, in separate containers, (b) the oligomoclectides, (c) instructions for adding a carrier and for use of the kit. The composition of the invention has antiallergic, antinflammatory, antiasthmatic, analgesic, hypotensive, immunosuppressive and cytostatic activity, is a beta-adrenergic agonist. The composition is useful for preventing or treating a respiratory, lung or malignant disease. The administered composition comprises oligo and is administered to reduce the production or vailability, or to increase the degradation of the target mRNA or to composition comprises oligo and is administered to reduce the amount of target polypeptide present in the lungs. The pulmonary obstruction, and/or bronchoconstriction and/or lungs or inflammation, allergies and/or bronchoconstriction and/or lung inflammation, allergies asthma, impeded respiratory disease, pulmonary contains asthma, impeded respiration, respiratory distress syndrome, pain, cystic fibrosis, allergic rhinitis, pulmonary transplantation rejection, pulmonary infections, bronchitis or cancer. The reduced adenosine content of the anti-sense oligos corresponding to the oligonucleotides into products that free adenosine into the system center any unwanted effects due to it Sequence 20 BP; 4 A; 2 C; 7 G; 7 T; 0 U; 0 Other; 8599999999999999999999999

0.3%; Score 16.4; DB 1; Length 20; 44.4%; Pred. No. 2.9e+02; ve 0; Mismatches 1; Indels 2126 CACATCCAAATGGAAATT 2143 CACATCCAACTGGAAATT 3 94.48; Query Match
Best Local Similarity 94.4\*
Matches 17; Conservative à 셤

ö

Gaps

0;

ADK77211 standard; DNA; 20 BP. ADK77211; RESULT 400

(first entry) 20-MAY-2004 

Chimeric phosphorothioate oligonucleotide to target Navl.3 #4545.

Navl.3; Analgesic; Nootropic; Neuroprotective; post-herpetic neuralgia; diabetic neuropathy; arthritic pain; migraine headache; infantile epilepsy; ataxia; ss.

Synthetic.

WO2004016754-A2.

26-FEB-2004

14-AUG-2003; 2003WO-US025465.

14-AUG-2002; 2002US-0403416P.

(PHAA ) PHARMACIA CORP.

Roberds SL;

WPI; 2004-203785/19.

New antisense compound targeted to a nucleic acid molecule encoding Nav1.3, useful for useful for treating a disease or condition associated with Nav1.3, e.g. pain, seizure disorder such as childhood seizure disorder, or ataxia.

nucleic acid molecule encoding Nav1.3, where the antisense compound specifically hybridizes with and inhibits the expression of Nav1.3. The compound and composition are useful for treating a disease or condition associated with Nav1.3, e.g. pain including but not limited to neuropathic pain, post-herpetic neuralgia, chronic pain, lower back pain, diabetic neuropathy, trigeminal neuropathy, arthritic pain, acute pain, pain from burns, migraine headache, cluster headache, mild-to-moderate headache; seizure disorder such as childhood seizure disorder, including but not limited to neonatal or infantile epilepsy; or ataxia. The present

The present invention relates to an antisense compound targeted to

Claim 4; SEQ ID NO 4545; 417pp; English.

```
ö
          nucleic acid molecule encoding Navi.3, where the antisense compound specifically hybridizes with and inhibits the expression of Navi.3. The compound and composition are useful for treating a disease or condition associated with Navi.3, e.g. pain including but not limited to neuropathic pain, post-herpetic neuralgia, chronic pain, lower back pain, diabetic neuropathy, trigeminal neuropathy, arthritic pain, acute pain, pain from burns, migraine headache, cluster headache, mild-to-moderate headache; seizure disorder such as childhood seizure disorder, including but not limited to neonatal or infantile epilepsy; or ataxia. The present sequence represents a chimeric phosphorothicate oligonucleotide with 2, MOB wings and a deoxy gap. Used during the antisense inhibition of human Navi.3 expression, the oligonucleotides are designed to target
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         New antisense compound targeted to a nucleic acid molecule encoding Mav1.3, useful for useful for treating a disease or condition associated with Nav1.3, e.g. pain, seizure disorder such as childhood seizure disorder, or ataxia.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Navl.3; Analgesic; Nootropic; Neuroprotective; post-herpetic neuralgia; diabetic neuropathy; arthritic pain; migraine headache; infantile epilepsy; ataxia; ss.
                                                                                                                                                                                                                                                                                                                              Gaps
 present invention relates to an antisense compound targeted to a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Chimeric phosphorothioate oligonucleotide to target Nav1.3 #4195.
                                                                                                                                                                                                                                                                                                                            ö
                                                                                                                                                                                                                                                                                       0.3%; Score 16.4; DB 1; Length 20;
14.4%; Pred. No. 2.9e+02;
ve 0; Mismatches 1; Indels
                                                                                                                                                                                                                                                        Sequence 20 BP; 7 A; 5 C; 4 G; 4 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Claim 4; SEQ ID NO 4195; 417pp; English.
                                                                                                                                                                                                                                                                                                                                                          4458 CACTGAAGTTGTCCAGGA 4475
                                                                                                                                                                                                                                                                                                                                                                                            20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ВР.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       14-AUG-2003; 2003WO-US025465.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       14-AUG-2002; 2002US-0403416P.
                                                                                                                                                                                                                                                                                                          94.48;
                                                                                                                                                                                                                                                                                                                                                                                            3 cacreaagriciccagea
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ADK76861 standard; DNA; 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                20-MAY-2004 (first entry)
                                                                                                                                                                                                                                                                                                                            Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     (PHAA ) PHARMACIA CORP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         WPI; 2004-203785/19.
                                                                                                                                                                                                                                                                                                       Local Similarity
les 17; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   WO2004016754-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     26-FEB-2004.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Roberds SL;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Synthetic.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ADK76861;
                                                                                                                                                                                                                                                                                          Query Match
                                                                                                                                                                                                                                                                                                                       Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                            RESULT 401
                                                                                                                                                                                                                                                                                                                                                                                                                                                                ADK76861
$$$$$$$$$$$$$$$$$$$$$$
                                                                                                                                                                                                                                                                                                                                                          à
                                                                                                                                                                                                                                                                                                                                                                                         ద
```

4475

1 CACTGAAGTTCTCCAGGA 18

BP.

```
exogenously regulatable neurotransmitter synthesis; multiple sclerosis; amyotrophic lateral sclerosis; autoimmune encephalomyelitis; Alzheimer's disease; Huntington's disease; Parkinson's disease; human; reverse transcription; RT-PCR; primer; 88.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Treating a neurodegenerative disorder, e.g. multiple sclerosis, or
Alzheimer's, Huntington's or Parkinson's diseases, comprises
administering cells capable of exogenously regulatable neurotransmitter
                                                                                                                                                                                                                                                                                                                                                                                    Human CD90 reverse transcription (RT)-PCR primer #1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          (UYRA-) UNIV RAMOT AT TEL AVIV LTD.
                                                                                                                                                                                                                                                                                                                                                                                                                                         CD90; neurodegenerative disorder;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  17-NOV-2003; 2003WO-IL000972.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    17-NOV-2002; 2002IL-00152905.
                                 4458 CACTGAAGTTGTCCAGGA
                                                                                                                                                                                                                    ADO71038 standard; DNA; 20
                                                                                                                                                                                                                                                                                                                              26-AUG-2004 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 WPI; 2004-420630/39.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           WO2004046348-A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                03-JUN-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       synthesis
                                                                                                                                                                                                                                                                         AD071038;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Offen D,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  RESULT 404
                                 음 성
                                                                                                                                                                                                                                                à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   셤
                                                                                                                                                                                                                                                ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   The present invention relates to an antisense compound targeted to a nucleic acid molecule encoding Navl.3, where the antisense compound specifically hybridizes with and inhibits the expression of Navl.3. The compound and composition are useful for treating a disease or condition associated with Navl.3, e.g. pain including but not limited to neuropathic pain, post-herpetic neuralgia, chronic pain, lower back pain, diabetic neuropathy, trigeminal neuropathy, arthritic pain, lower back pain, pain from burns, migrainne headache, cluster headache, mild-to-moderate headache; seizure disorder such as childhood seizure disorder, including but not limited to neonatal or infantile epilepsy; or ataxia. The present sequence represents a chimeric phosphorothioate oligomicleotide with
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     New antisense compound targeted to a nucleic acid molecule encoding abav1.3, useful for useful for treating a disease or condition associated with Nav1.3, e.g. pain, seizure disorder such as childhood seizure disorder, or ataxia.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Navl.3; Analgesic; Nootropic; Neuroprotective; post-herpetic neuralgia; diabetic neuropathy; arthritic pain; migraine headache; infantile epilepsy; ataxia; ss.
                                                                                                                                                                                                                                             Gaps
sequence represents a chimeric phosphorothioate oligonucleotide with 2'MOS wings and a deoxy gap. Used during the antisense inhibition of human Navl.3 expression, the oligonucleotides are designed to target different regions of the human Navl.3 RNA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           2'MOE wings and a deoxy gap. Used during the antisense inhibition of human Nav1.3 expression, the oligonucleotides are designed to target different regions of the human Nav1.3 RNA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Chimeric phosphorothicate oligonuclectide to target Navl.3 #5838
                                                                                                                                                                                                                                                ö
                                                                                                                                                                                     Query Match 0.3%; Score 16.4; DB 1; Length 20; Best Local Similarity 94.4%; Pred. No. 2.9e+02; Matches 17; Conservative 0; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        0.3%; Score 16.4; DB 1; Length 20; 94.4%; Pred. No. 2.9e+02; ve 0; Mismatches 1; Indels
                                                                                                                                   Sequence 20 BP; 6 A; S C; 4 G; S T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Sequence 20 BP; 5 A; 5 C; 5 G; 5 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Claim 4; SEQ ID NO 5838; 417pp; English.
                                                                                                                                                                                                                                                                                             4458 CACTGAAGTTGTCCAGGA 4475
                                                                                                                                                                                                                                                                                                                              2 CACTGAAGTTCTCCAGGA 19
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    14-AUG-2002; 2002US-0403416P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            14-AUG-2003; 2003WO-US025465
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ADK78504 standard; DNA; 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      (PHAA ) PHARMACIA CORP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   WPI; 2004-203785/19.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       W02004016754-A2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   20-MAY-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         26-FEB-2004.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Roberds SL;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Synthetic.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ADK78504;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                          ADK7 ABS04

XX
 ADK7

XX
 ADK7

XX
 ADK7

XX
 ADK7

XX
 ADK8

ADK8
  ន្តដូបប្រកួន
                                                                                                                                                                                                                                                                                                                                               a
                                                                                                                                                                                                                                                                                                ઠે
```

Levy Y;

Melamed E,

```
The invention relates to a method of treating a neurodegenerative disorder comprises administering to an individual calls capable of exogenously regulatable neurotransmitter synthesis. Treating a neurodegenerative disorder comprises administering to an individual cells capable of exogenously regulatable neurotransmitter synthesis and periodically exposing the individual to an agent or condition capable of regulating the synthesis of the neurotransmitter in the cells. The method and cells are useful in treating a neurodegenerative disorder e.g. multiple sclerosis, amyotrophic lateral sclerosis, autoimmune encephalomylitis, Alzheimer's disease, or Huntington's disease, preferably Parkinson's disease. The present sequence represents a human CD90 reverse transcription (RT)-PCR primer.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ô
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    0.3%; Score 16.4; DB 1; Length 20;
14.4%; Pred. No. 2.9e+02;
ve 0; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Sequence 20 BP; 4 A; 6 C; 6 G; 4 T; 0 U; 0 Other;
Example 3; SEQ ID NO 1; 110pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      2978 TAGTGGACCAGAGCCATC 2995
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Query Match
Best Local Similarity 94.4%;
Matches 17; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AAH62440 standard; DNA; 21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AAH62440
ID AAH63
XX
```

ö

Gaps

ö

94.48;

Best Local Similarity 94.4 Matches 17; Conservative

AAH62440;

```
The invention comprises the amino acid and coding sequences of novel human proteins - designated NoVX proteins (e.g. NoV1). The NoVX DNA and protein sequences are useful for treating or preventing NOVX-associated disorders, such as: diabetes; obesity; infectious disease; anorexia; neurodegenerative disorders; Alzelmer's disease; Parkinson's disease; immune disorders; haematopoietic disorders; dyslipidaemias; metabolic syndrome X; wasting disorders; cancer; Chron's disease; cirrhosis; liver failure; infertility; cardiomyopathy; atherosclerosis; hypertension; scleroderma; haemophilia; pancreatitis; asthma; pain; psoriasis; and epilepsy. The NoVX DNA sequences of the invention are useful in screening assays and detection assays (e.g. chromosomal mapping, tissue typing and forensic biology). The NoVX DNA sequences can also be used to create a transpent of animal. The present DNA sequence represents a NoVX gene PCR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Novel isolated human polypeptide, designated NOVX, useful for treating or preventing cancer, diabetes, obesity, dyslipidemia, anorexia, and metabolic, neurodegenerative, immune and hematopoietic disorders.
                            diabetes; obesity; infectious disease; neurodegenerative disorder; ss; anorexia; Alzheimer's disease; Parkinson's disease; immune disorder; haematopoietic disorder; dyslipidaemias; metabolic syndrome X; cancer; wasting disorder; Chron's disease; cirrhosis; liver failure; infertility; cardiomyopathy; atherosclerosis; hypertension; scleroderma; haemophilia; pancreatitis; asthma; pain; psoriasis; epilepsy; chromosomal mapping; tissue typing; forensic biology; transgenic animal.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Furtak K, Perna A, Patturajan M, Shimkets RA, Guo X;
SJ, Burgess CE, Malyankar UM, Tchernev VT, Vernet CAM;
KA, Agee M, Rastelli L, Shenoy SG, Grosse WM, Alsobrook JP;
DM, Gerlach V, Edinger S, Macdougall JR, Peyman JA;
F, Stone DJ, Ellerman K, Gangolli EA;
       NOVX; NOV; PCR; primer; gene therapy; NOVX-associated disorder;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Score 16.4; DB 1; Length 21; Pred. No. 2.9e+02; 0; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sequence 21 BP; 3 A; 3 C; 6 G; 9 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Example 1; Page 187; 247pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1161 TCCTGAACGTTTTGTTGA 1178
                                                                                                                                                                                                                                                                                                                                                                                                                    2000US-0242767P.
2000US-0242768P.
2000US-0242882P.
2000US-0243802P.
2000US-0243502P.
2000US-0243591P.
2000US-0243591P.
2000US-0243591P.
2000US-0243592P.
2000US-024362P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Query Match 0.3%;
Best Local Similarity 94.4%;
Matches 17; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  2001US-0316509P
                                                                                                                                                                                                                                                                                                                                                         24-OCT-2001; 2001WO-US046057
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           primer of the invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      (CURA-) CURAGEN CORP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                WPI; 2002-527917/56.
                                                                                                                                                                                                                                                                   WO200246408-A2.
                                                                                                                                                                                                                                                                                                                                                                                                                                              24-OCT-2000;
24-OCT-2000;
24-OCT-2000;
26-OCT-2000;
26-OCT-2000;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 02-MAR-2001;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               26-OCT-2000;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  26-OCT-2000;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            27-OCT-2000;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            31-AUG-2001;
                                                                                                                                                                                                                           Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                     24-OCT-2000;
                                                                                                                                                                                                                                                                                                                                                                                                                               24-OCT-2000;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Lepley DM,
Gunther E,
                                                                                                                                                                                                                                                                                                                13-JUN-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Casman
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Spytek
ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      DNA sequences AAH62100 - AAH62688 represent segments of human genes which contain single nuclectide polymorphisms (SNPs). A method is included in the invention for analysing a nucleic acid sample, which consists of determining the base occupying any one of the polymorphic sites of its agnosis or monitoring of diseases, such as cancer, inflammation, heart diseases, diseases of the cardiovascular system, and infection by microorganisms. The oligonucleotides are also useful in the manufacture of a medicament for the treatment or prophylaxis of the diseases, and as a pharmaceutical. SNP containing oligonucleotides are useful in applications such as pharmaceutical in the manufacture of a medicament for the creating oligonucleotides are useful in applications such as pharmaceutical.
                                                                                                               Proteasome 26S subunit ATPase polymorphism containing DNA fragment #341.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      New nucleic acid segments of the human genome, particularly from genes including polymorphic sites, for phenotype correlation, forensics, paternity testing, medicine and genetic analysis.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Revised record issued on 09-SEP-2004 : Correction to Feature Table Key
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Gaps
                                                                                                                                                         Single nucleotide polymorphism; SND; human; cancer; inflammation; heart disease; paternity testing; forensic science; ds.
                                                                                                                                                                                                                                                                                                                                                      /*tag= a
/standard name= "single nucleotide polymorphism"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ô
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              0.3%; Score 16.4; DB 1; Length 21;
14.4%; Pred. No. 2.9e+02;
ve 0; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Sequence 21 BP; 6 A; 3 C; 6 G; 6 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                (WHED ) WHITEHEAD INST BIOMEDICAL RES.
                                                                                                                                                                                                                                                                                                     Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Lander ES;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               4030 TGGCTCTGCATTGGTACA 4047
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Claim 1; Page 57; 80pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1 recercicarrecraca 18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ABT08334 standard; DNA; 21 BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        medicine and genetic analysis
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           17-NOV-2000; 2000WO-US031639
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        99US-0167334P
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               94.48;
                                                                                (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Best Local Similarity 94.4
Matches 17; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Cargill M, Ireland JS,
                                                                                                                                                                                                                                                                                                                                                    /*tag=
                                                        (revised)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        WPI; 2001-367705/38.
                                                                                                                                                                                                                                                                                                                                                                                                                      WO200138576-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        24-NOV-1999;
                                                                                                                                                                                                                                                               Unidentified
                                                                                                                                                                                                                                            Homo sapiens
                                                        09-SEP-2004
                                                                                12-SEP-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   31-MAY-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ABT08334;
                                                                                                                                                                                                                                                                                                                               variation
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Query Match
```

ö

Gaps

ö

21

g

(first entry)

28-NOV-2002

XXXXXX

RESULT 405 ABT08334

8 셤 Human NOV4a PCR primer #2.

gibbs-10-667-022-4.rng

RESULT 406

```
cardiant, hypotensive, antiarteriosclerotic, anorectic, virucide, cardiant, hypotensive, antiarteriosclerotic, anorectic, virucide, cardiant, hypotensive, antiarteriosclerotic, ancuroprotective, antibacterial, fungicide, profecoacide, noctropic, neuroprotective, antiarthritic, antiarthritic, antiarthritic, antiarthritic, antiarthritic, antiarthritic, antiarthritic, antinflammatory, dermatological, antiarchment antilipaemic cartivities. The polypeptides, nucleic acid molecules and antilipaemic cartivities. The polypeptides, nucleic acid molecules and antilipaemic characters, diabetes, obseity, infectious diseases (viral, bacterial, tungal, helmithic, and protezeal), anorexia, cancer, cardiovascular diseases including hypertension and atherosclerosis, neurodegenerative ciscorders, Alzheimer's disease, Parkinson's disease, epilepsy, immune ciscorders, asthma and various types of dyslipidaemia. The nucleic cacids and polypeptides may also be used as targets for the identification of small molecules that modulate or inhibit neurogenesis, cell differentiation, cell proliferation, haemopoiesis, wound healing and anglogenesis, in gene therapy and the in generation of antibodies that child immunospecifically to NOVX substances for use in therapeutic or diagnostic methods. The nucleic acids may be further used as
                                                                                                                                                                                                                                                                                                                                                                                                                                          hybridisation probes, in chromosome mapping, tissue typing, preventive medicine and pharmacogenomics. The current sequence is that of the human NOVX-related PCR primer which was used in the exemplification of the
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Compsn. of monoclonal antibodies against interferon receptor - useful as immuno:modulator, eg. for treating AIDS.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       The primers and probes given in AAQ86459-75 were used to amplify and detect IFN-alpha, IFN-beta, IFN-gamma, IFN-omega and aldolase A species
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Interferon receptor; IFN; interferon-alpha; monoclonal antibody; immunomodulator; AIDS; HIV; human immunodeficiency virus; primer; PCR; polymerase chain reaction; 89.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Score 16.4; DB 1; Length 21;
Pred. No. 2.9e+02;
0; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Sequence 21 BP; 3 A; 3 C; 6 G; 9 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       (EUBI-) LAB EURO BIOTECHNOLOGIE SA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Example 5; Page 49; 105pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1161 TCCTGAACGTTTTGTTGA 1178
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AAQ86460 standard; DNA; 21 BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      0.3%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             94WO-EP003114.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          93EP-00402279
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TCCTGAAGGTTTTGTTGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     IFN-alpha nt723-732 primer.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   17; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                (revised)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Tovey MG, Benizri EJ;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           WPI; 1995-131187/17.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   WO9507716-A1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             16-SEP-1994;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       17-SEP-1993;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                23-MAR-1995.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              25-MAR-2003
16-OCT-1995
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Synthetic.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               invention.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AAQ86460;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          4
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               RESULT 407
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AAQ86460
         ઠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        요
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              NOVX; antidiabetic; anorectic; cardiant; hypotensive; antidiabetic; anorectic; virucide; antibacterial; fungicide; protozoacide; nootropic; neuroprotective; antiparkinsonian; anticonvulsant; noteopathic; antiarthritic; antininflammatory; dermatological; antiasthmatic; antilipaemic; metabolic; diabetes; obsestly; infection; anorexia; cancer; cardiovascular; hypertension; atheroaclerosis; neurodegenerative; Alzheimer's disease; Parkinson's; epilepsy; immune; osteoarthritis; haemopoietic; inflammatory skin disorder; asthma; dyslipidaemia; neurogenesis; cell differentiation; proliferation; haemopoiesis; wound healing; anglogenesis; gene therapy; chromosome mapping; tissue typing; pharmacogenomic; human; PCR; primer; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    New isolated NOVX polypeptide, useful for preventing, diagnosing or treating NOVX-associated disorders, e.g. osteoarthritis, obesity, atherosclerosis, cancer, Parkinson's disease, asthma, or infections.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Fernandes ER, Gerlach UL, Gorman L, Grosse WM, Guo X, Ji W, Kekuda R, Li L, Macdougall JR, Padigaru M, Patturajan M; Peterson JD, Rastelli L, Shimkets RA, Spytek KA, Stone DJ; Vernet CAM, Voss EZ, Zhong M;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            The invention relates to a novel isolated NOVX polypeptide. The
                                                                                                                                                                                                          Reverse PCR primer Ag2764 used to analyse human NOV expression.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Example C; SEQ ID NO 390; 478pp; English
                                                                      ADH17700 standard; DNA; 21 BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            2002US-0384044P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               2002US-0384215P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              2002US-0384297P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               2002US-0384327P.
2002US-0384352P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              2002US-0385211P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      2002US-0393333P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           2002US-0402154P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              2002US-0402171P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        2002US-0402204P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               2002US-0412954P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    2002US-0414975P.
2002US-0416661P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           02-MAY-2003; 2003WO-US013690
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     2002US-0383075P
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          2002US-0402205P
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  2002US-0405175P
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       2002US-0406129P
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 2002US-0420851P
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              2003US-00428275
                                                                                                                                                                (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        (CURA-) CURAGEN CORP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           WPI; 2004-053040/05.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 WO2003093432-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  30-MAY-2002;
30-MAY-2002;
30-MAY-2002;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              09-AUG-2002;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               30-MAY-2002;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      30-MAY-2002;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              31-MAY-2002;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          09-AUG-2002;
22-AUG-2002;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               23-SEP-2002;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       27-AUG-2002;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    30-SEP-2002;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              07-OCT-2002;
                                                                                                                                                                11-MAR-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 13-NOV-2003
                                                                                                                   ADH17700;
```

ö

Gарв

ô

```
ð
                                                                                                                                          g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            This invention describes a novel method for identifying an inhibitor of potentially useful for treatment of cancer, where the inhibitor is active potentially useful for treatment of cancer, where the inhibitor is subject to loss of heterozygosity (LOH) in a cancer. The inhibitor is used for preventing the development of cancer in a patient having a precancerous condition, by administering to the patient a first allele present in cells of the precancerous condition, where the normal somatic present in cells of the precancerous condition, where the normal somatic colls of the patient are heterozygous for the first gene, the inhibitor is active on at least one but less than all allelic forms of the gene present in a population and targets only one allelic form present in the cused in the diagnosis, prevention and treatment of LOH disorders, e.g. used in the diagnosis, prevention and treatment of LOH disorders, e.g. cancers, atherosclerotic plaques, premalignant metaplastic or dysplastic lesions, benigh tumours, endometriods, polycystic kindrey disease, and graft versus host disease. The method can also be used to remove malignant cells from bone marrow transplants. AAZ25812-Z26825 represent human polymorphic sites described in the method of the invention
                                                                                                                                                ö
in the sera of HIV-infected individuals. IFN-alpha-5 was the dominant IFN species present. (Updated on 25-MAR-2003 to correct PN field.)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Polymorphism; human; inhibitor; cancer; treatment; cell growth; LOH; cell viability; loss of heterozygosity; precancerous condition; ASI; allele specific inhibitor; somatic cell; diagnosis; prevention; atherosclerotic plaque; premalignant metaplaetic lesion; endometriosis; dysplastic lesion; behign tumour; polycystic kidney disease; transplant; graft versus host disease; malignant cell removal; bone marrow; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Identifying target genes for allele-specific drugs - used for diagnosis, prevention and treatment of, e.g. cancers, atherosclerotic plaque, dysplastic lesions, endometriosis or graft versus host disease.
                                                                                                                                                  Gaps
                                                                                                                                                  ö
                                                                                                          21;
                                                                                                                                                3; Indels
                                                                                                     Match 0.3%; Score 16.2; DB 1; Length Cocal Similarity 85.7%; Pred. No. 3.1e+02; les 18; Conservative 0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Sequence 21 BP; 4 A; 7 C; 3 G; 7 T; 0 U; 0 Other;
                                                               Sequence 21 BP; 7 A; 5 C; 5 G; 4 T; 0 U; 0 Other;
                                                                                                                                                                                          2165 TACATGAAATGGTCCAGCAGA 2185
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Stanton VP;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Disclosure; Fig 7; 605pp; English.
                                                                                                                                                                                                                               rccarcagardarccaccada 21
                                                                                                                                                                                                                                                                                                                                     BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                            Human polymorphic region 774.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 98WO-US005419.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       97US-0041057P.
                                                                                                                                                                                                                                                                                                                                     AAZ26585 standard; DNA; 21
                                                                                                                                                                                                                                                                                                                                                                                                                   (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             (VARI-) VARIAGENICS INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Ledley FD,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            WPI; 1998-521232/44.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 19-MAR-1998;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      WO9841648-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         20-MAR-1997;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             24-SEP-1998
                                                                                                                                                                                                                                                                                                                                                                                                                     30-NOV-1999
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Housman D,
                                                                                                                                                                                                                                                                                                                                                                             AAZ26585;
                                                                                                                Query Match
                                                                                                                                                        Matches
                                                                                                                                                                                                                                                                                                RESULT 408
                                                                                                                                                                                                                                                                                                                    AAZ26585/
                                                                                                                                                                                                                                                                                                                                         88333
                                                                                                                                                                                                                                   셤
                                                                                                                                                                                                 8
```

```
ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Modulating movement of a cell within or to the skin of a mammal can be achieved by administering an antagonist or agonist of cutaneous T cellattracting chemckine (CTACK) or vasoactive intestinal contractor (Vic.) chemckine. The antagonist is selected from a mutein of natural CTACK or Vic. an antibody which neutrallses CTACK or Vic or an antibody which block GPR2 ligand binding. The CTACK or Vic agonists or antagonists are useful for treating medical conditions or diseases associated with immunological conditions of the skin. Two primers (AAA47554, AAA47555) were used to amplify a human CTACK fragment for use in competitive RT-PCR
                             ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     T cell-
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Morales JM;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Gaps
                              Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Modulating cell movement within the skin, useful for treating immunological skin conditions or diseases comprises administering attracting chemokine or vasoactive intestinal contractor chemokine
                                                                                                                                                                                                                                                                                           Cutaneous T-cell attracting chemokine; CTACK; skin; cell movement; migration; vasoactive intestinal contractor; Vic; GPR2; agonist; antibody; immunological condition; mutein; primer; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ô
                              ;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Length 21;
Length 21;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Homey B,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       3; Indels
                              Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Sequence 21 BP; 3 A; 9 C; 2 G; 7 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       0.3%; Score 16.2; DB 1;
llarity 85.7%; Pred. No. 3.1e+02;
Conservative 0; Mismatches 3;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Hudak SA,
 0.3%; Score 16.2; DB 1;
85.7%; Pred. No. 3.1e+02;
iive 0; Mismatches 3;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Soto H, Lui Y, Y LM, Zlotnik A;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1670 GAGAGCCTAAGGAAAATGGGC 1690
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Example 5; Page 50; 79pp; English.
                                                               644 TTGAATATGATAAAAGCCTGG 664
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    21 GGGÁTGCTAAGGAAAATGGGC 1
                                                                                           rrcaagargacaaaggccrgg 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               BP.
                                                                                                                                                                         BP
                                                                                                                                                                                                                                                                                                                                                                                                                                                        99WO-US030819.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       98US-0113858P.
99US-00322580.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ABX11428 standard; DNA; 21
                                                                                                                                                                         AAA47555 standard; DNA; 21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Wang W, Oldham ER, Soto
Kellermann S, Mcevoy LM,
                                                                                                                                                                                                                                       (first entry)
                                                                                                                                                                                                                                                                    Primer for CTACK fragment.
                                   Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            agonists or antagonists.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    (SCHE ) SCHERING CORP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              WPI; 2000-465633/40.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Local Similarity
      Query Match
Best Local Similarity
Matches 18; Conserv
                                                                                                                                                                                                                                                                                                                                                                                               WO200038713-A1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                           23-DEC-1999;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          24-DEC-1998;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         27-MAY-1999;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            18;
                                                                                                                                                                                                                                     20-OCT-2000
                                                                                                                                                                                                                                                                                                                                                                                                                              06-JUL-2000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Query Match
                                                                                                                                                                                                        AAA47555
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   RESULT 410
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ABX11428/
ID ABX1
                                                                                                                                                                                           용
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ð
```

```
This sequence represents a primer which was used in quantitative analysis of protein expression in pro-B cells cell man origin that are deficient in functional Pax5 expression. The autologous human Pax5-deficient pro-B cells or pax5-deficient pro-B cells derived from a HiA-matched donor are useful in treating disorders associated with a depletion of the lymphoid system, including immunodeficiencies or AIDS. Pax5-deficient pro-B cells derived from an HiA-matched donor are also useful in treating tumours. Alternatively, the pro-B cells derived from an HiA-matched donor are also useful in the pro-B cells derived from an HiA-matched donor are inseful in non-myeloablative tumour therapy. The expression of the Pax5 gene is inactivated by means of antisense RNA, small interfering RNA or riboxyme. In inactivated by means of antisense RNA, small interfering RNA or siboxyme. In inactivating the expression of the Pax5 gene is inserted into lentiviting the expression of the Pax5 gene is inserted into lentivital vector. The lentivital vector is transfected in the proper particulated packaging cells to generate pseudoxypped lentivity and provided the properties of the pax5 into appendix the properties of the pax5 into appendix the pax5 into a provider molecules and provider molecules and provider particulated packaging cells to generate pseudoxypped lentivity and provided particulated packaging cells to generate pseudoxypped lentivity and particulated packaging cells to generate pseudoxypped lentivity and particulated pack particulated packaging cells to generate pseudoxypped lentivity and packaging cells to generate pseudoxypped lentivity and packaging cells to generate packaging cells to packaging cells to packaging cells to packaging cells to packaging ce
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             The pro-B cells obtained are infected with the pseudotyped lentivirus and cultured. Other functions of the Pax5-deficient pro-B cells are either
                                                                                          se; primer; pro-B cell; human; Pax5; HLA-matched donor; lymphoid system;
immunodeficiency; AIDS; non-myeloablative tumour therapy; antisense RNA;
small interfering RNA; ribozyme; lentiviral vector.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        New Pax5-deficient pro-B cells of human origin, useful for treating tumors or disorders associated with a depletion of the lymphoid system,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      human; se; short interfering RNA; siRNA; angiogenesis; vascular endothelial growth factor; VEGF; VEGF receptor; Flt-1; Flx-1,KDR; kinase domain region; diabetic retinopathy; agge-related macular degeneration; inflammatory disease; psoriasis; rheumatoid arthritis; cancer; breast; retinoblastoma; Wilm's tumour;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Human Flt-1 DNA sequence, a target for siRNA inhibition SeqID 408
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     0.3%; Score 16.2; DB 1; Length 21; 85.7%; Pred. No. 3.1e+02; ive 0; Mismatches 3; Indel8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Sequence 21 BP; 7 A; 3 C; 7 G; 4 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                partially suppressed or completely inactivated.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             (BOEH ) BOEHRINGER INGELHEIM INT GMBH.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Heavey B;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Disclosure; Page 18 ; 28pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        2648 AACTGATGCCTTATCTTGACC 2668
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AACTGATGCCCTATTTTGCCC 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     BP.
                                                                                                                                                                                                                                                                                                                                                                                                                    08-MAY-2002; 2002EP-00010439
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 08-MAY-2002; 2002EP-00010439
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ADJ97635 standard; DNA; 21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             06-MAY-2004 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Busslinger M, Mikkola I,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        18; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            WPI; 2003-879906/82.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Local Similarity
                              rEST2 primer #2.
                                                                                                                                                                                                                                                                                     EP1361268-A1.
                                                                                                                                                                                                                         Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                     12-NOV-2003.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              e.g. AIDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ADJ97635;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  RESULT 412
ADJ97635
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Matches
8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      a mammal that is modulated by administering to a mammal an antagonist of CTACK, an agonist of CTACK, an antagonist of vic, or an agonist of Vic. The methods are useful for modulating movement of a cell within or to the skin of a mammal, purifying a populating of cells, producing a ligand: receptor complex, modulating physiology or development of a GPR2 receptor complex, modulating physiology or development of a GPR2 receptor-ligand interaction, and for treating a patient suffering from a skin disorder such as psoriasis, skin cancer, carcinoma, inflammation, allergies, contact dermatitis, allergic dermatitis, wound healing and infections (including microbial, viral and parasitic) comprising administering an antagonist against GPR2, vic or CTACK. The invention regulates the development or physiology of relevant cells. The present sequence represents the human cutaneous-T-cell-attracting chemokine CTACK
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Modulating movement of cell within or to the skin of mammal useful for treating a skin disorder comprises administering an antagonist/agonist of
                                                                                                                                                                                                                                             GPR2 expressing cell modulation; carcinoma; inflammation; wound healing; allergy; contact dermatitis; allergic dermatitis; microbial infection; cell movement to skin; cell movement within skin; parastitic infection; cutaneous-T-cell-attracting chemokine; viral infection; CTACK; ss; reverse transcription; cutaneous-T-cell-attracting chemokine.
                                                                                                                                                                                                                  RT-PCR; primer; human; chemokine; skin disorder; psoriasis; skin cancer;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              The invention relates to the movement of a cell within or to the skin of
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Homey B, Morales JM;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        competitive reverse transcription (RT) - PCR antisense primer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             / Match 0.3%; Score 16.2; DB 1; Length 21; Local Similarity 85.7%; Pred. No. 3.1e+02; Nes 18; Conservative 0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Hudak SA, I
Zlotnik A;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Sequence 21 BP; 3 A; 9 C; 2 G; 7 T; 0 U; 0 Other;
                                                                                                                                                      Human CTACK competitive RT-PCR antisense primer.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Wang W, Oldham ER, Soto H, Liu Y,
Kellermann S, Mcevoy LM, Bowman EP,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1670 GAGAGCCTAAGGAAAATGGGC 1690
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Example 5; Page 21; 39pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              21 GGGATGCTAAGGAAAATGGGC 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Oldham ER, Soto H,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       98US-0113858P.
99US-0136570P.
99US-00471549.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           02-JUL-2001; 2001US-00898751.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ADE86772 standard; DNA; 21
                                                                                          (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    treating a skin disorder chemokines CTACK and Vic.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         (SCHE ) SCHERING CORP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      WPI; 2003-255187/25.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               US2002160024-A1.
                                                                                                                                                                                                                                                                                                                                                                                                                                               Homo sapiens.
                                                                                          20-MAY-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          24-DEC-1998;
27-MAY-1999;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      23-DEC-1999;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              31-OCT-2002
                              ABX11428;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ADE86772;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Wang W,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Best Loca
Matches
```

ö

Gapa

ö

29-JAN-2004 (first entry)

RESULT 411 ADE86772,

ઠ 셤

```
antipsoriatic; antirheumatic; antiarthritic.
                                                  Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ABK00643;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      RESULT 414
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ABK00643
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  엄
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   This invention relates to novel compositions that comprise short conterfering RNA (siRNA) molecules, which can be used to inhibit and cause and ordered aggradation of mRNA from human vascular target and cause continuous degradation of mRNA from human vascular endothelial growth cactor (VEGF), the VEGF receptor (FIL-1) and the FIk-1/KDR (kinase domain cactor (VEGF), the VEGF receptor (FIL-1) and the FIk-1/KDR (kinase domain cactor) genes, as well as mutants derived that form an RNA duplex and describes sense and antisense RNA strands that form an RNA duplex and control to the target mRNA, such that expression is inhibited and the target bind to the target mRNA, such that expression is inhibited and the target of agent is useful for treating disease associated with anglogenesis and the overexpression of VEGF, which include diabetic retinopathy, agented macular degeneration, inflammatory disease, psoriasis and related macular degeneration, inflammatory disease, psoriasis and cancers including breast, retinoblastoma, Wilm's tumour and lymphoma. Concers including breast, retinoblastoma, Milm's tumour and lymphoma. Concers including breast, retinoblastoma, wilm's tumour and lymphoma. Computhalmological, antiinflammatory, antipsoriatic, antitihemmatic and antiarthritic activities. This oligomucleotide is a human Flt-1 DNA coligo, a target for sirNA inhibition of the invention.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  human; ss; short interfering RNA; siRNA; angiogenesis; vascular endothelial growth factor; VEGF; VEGF receptor; Flt-1; Flk-1/KDR; kinase domain region; diabetic retimopathy; age-related macular degeneration; inflammatory disease; psoriasis; rheumatoid arthritis; cancer; breast; retinoblastoma; Wilm's tumour; lymphoma; cytostatic; antidiabetic; ophthalmological; antiinflammatory;
                                                                                                                                                                                                                                                                                                                                                                                                                               Novel short interfering RNA (siRNA) comprises sense and antisense RNA strands, useful for inhibiting expression of human vascular endothelial growth factor mRNA, for treating angiogenic disease, e.g. diabetic
           lymphoma; cytostatic; antidiabetic; ophthalmological; antiinflammatory;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Human Flt-1 DNA sequence, a target for siRNA inhibition SeqID 409.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ..
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       0.3%; Score 16.2; DB 1; Length 21;
85.7%; Pred. No. 3.1e+02;
iive 0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Sequence 21 BP; 6 A; 1 C; 8 G; 6 T; 0 U; 0 Other;
                                     antipsoriatic, antirheumatic; antiarthritic.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Disclosure; SEQ ID NO 408; 218pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 2432 AAGGICTTAGIGATGCTGAGG 2452
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ADJ97636 standard; DNA; 21 BP
                                                                                                                                                                                                                                                  24-JUL-2002; 2002US-0398417P.
14-NOV-2002; 2002US-00294228.
                                                                                                                                                                                                            18-JUL-2003; 2003WO-US022444.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                06-MAY-2004 (first entry)
                                                                                                                                                                                                                                                                                                                 (UYPE-) UNIV PENNSYLVANIA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Local Similarity 85.7 hes 18; Conservative
                                                                                                                                                                                                                                                                                                                                                         Tolentino MJ, Reich SJ;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        retinopathy and cancer.
                                                                                                                                                                                                                                                                                                                                                                                                 WPI; 2004-203472/19.
                                                                                                                             WO2004009769-A2
                                                                                        Homo sapiens.
                                                                                                                                                                       29-JAN-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ADJ97636;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           RESULT 413
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ADJ97636
```

ð g

```
This invention relates to novel compositions that comprise short control interfering RNA (siRNA) molecules, which can be used to inhibit considered and cause anglogenesis. Specifically, it refers to siRNAs that tearget and cause RNA-induced degradation of mRNA from human vascular endothelial growth factor (VEGF), the VEGF receptor (Flt-1) and the Flk-1/KDR (kinase domain region) genes, as well as mutants derived thereof. The present invention conscribes sense and antisense RNA strands that form an RNA duplex and antisense RNA strands that form an RNA duplex and confidence of the to the trarget mRNA, such that expression is inhibited and the target confidence as such, siRNA administered in combination with a therapeutic degraded. As such, siRNA administered in combination with a therapeutic conscribed actual for treating diseases associated with anglogenesis and related macular degeneration, inflammatory disease, psoriasis and related macular degeneration, inflammatory disease, psoriasis and concern including breast, retinoblascoms, Wilm's tumour and lymphoma. Concerningly, these compositions exhibit cytostatic, antidiabetic, ophthalmological, antiinflammatory, antipsoriatic, antitheumatic and antiarthritic activities. This oligomuclectide is a human Flt-1 DNA coligo, a target for sirNA inhibition of the invention.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Human; ss; antisense therapy; cytostatic; antiinflammatory; haemostatic; cerebroprotective; nootropic; neuroprotective; antiparkinsonian; muscular; CD20; neurite growth inhibitor gene; NGG0; hammerhead ribozyme; DNAzyme; inozyme; G-claaver; amberzyme; zinzyme; lymphoma; leukaemia; B-cell lymphoma; non-Hodgkin's lymphoma; MHL; lymphocytic leukaemia; human immunodeficiency virus; HIV associated NHL; mantle-cell lymphoma; MCL; immunocytoma; IMC; immune thrombocytopaenia; stroke; dementia;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Novel short interfering RNA (siRNA) comprises sense and antisense RNA strands, useful for inhibiting expression of human vascular endothelial growth factor mRNA, for treating angiogenic disease, e.g. diabetic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Length 21;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Sequence 21 BP; 6 A; 1 C; 8 G; 6 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      0.3%; Score 16.2; DB 1;
85.7%; Pred. No. 3.1e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Disclosure; SEQ ID NO 409; 218pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Human NOGO Hammerhead Ribozyme #643.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             2433 AGGICTTAGIGATGCTGAGGA 2453
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ABK00643 standard; RNA; 17 BP.
                                                                                                                                                              18-JUL-2003; 2003WO-US022444.
                                                                                                                                                                                                                                      24-JUL-2002; 2002US-0398417P.
14-NOV-2002; 2002US-00294228.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 (first entry)
                                                                                                                                                                                                                                                                                                                                                          (UYPE-) UNIV PENNSYLVANIA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                18; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                               Folentino MJ, Reich SJ;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 retinopathy and cancer.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        WPI; 2004-203472/19.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Local Similarity
WO2004009769-A2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     12-MAR-2002
                                                                                 29-JAN-2004
```

3735 TTTAGCCATAGCATCT 3750

ઠ g

TTTAGCCATAGCATCT

11

RESULT 415

ADB40345

```
The invention relates to a nucleic acid molecule which down regulates expression of a CD20 gene and a nucleic acid molecule which down cregulates expression of a neurite growth inhibitor gene (NGOD). The nucleic acids may be enzymatic nucleic acids (e.g. a ribozyme or a nucleic acids may be enzymatic nucleic acids (e.g. a ribozyme or a DNAzyme) an Inozyme (an endolytic nucleic acid cleaving an RNA molecule or possessing an NCH motif), a G-leaver (cleaving RNA with a NKH with a NYN motif) proceed of CD20 in the presence of a divalent cation that is preferably Mg^2+.

C for CD20 in the presence of a divalent cation that is preferably Mg^2+.

C Furthermore, it may be contacted with a cell to reduce CD20 activity of the cell and treat a patient having a condition associated with the level of CD20. The treatment may further comprise the use of one or more contacted in particular, the CD20 targetting nucleic acid may be used to treat lymphoma, leukaemia, B-call lymphoma, low-grade or follicular non-Hodgkin's lymphoma (MLL), bulky low-grade or follicular NHL, lymphocytic lymphoma (MCL), immunocytoma (IMC), small B-cell lymphocytic lymphoma, created may be contacted with a cell to reduce NGGO activity of the presence of a divalent daving a condition associated with he level of cell and treat a patient having a condition associated with he level of NGO. The treatment may further comprise the use of one or more cell and treat a patient having a condition associated with he level of therapies. In particular, the NOGO-tragetting nucleic acid may be used to treat central nervous system (CNS) injury and cerebrovascular accident (CNA, stroke), Alzheimer's disease, demential, multiple sclerosis (MLS), chemotherspy-induced neuropathy, anyworrophic lateral sclerosis (MLS), chemotherspy-induced neuropathy, anyworrophic lateral sclerosis (MLS), chemotherspy-induced neu
inflammatory arthropathy; central nervous system injury; cerebrovascular accident; CVA; Alzheimer's disease; multiple sclerosis; chemotherapy-induced neuropathy; amyotrophic lateral sclerosis; ALS; Parkinson's disease; ataxia; Huntington's disease; Creutzfeldt-Jakob disease; muscular dystrophy; neurodegenerative disease.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Nucleic acid molecules, e.g., enzymatic nucleic acids and antisense constructs, which down regulate expression of a CD20 gene or neurite growth inhibitor gene useful for treating, e.g., lymphoma, leukemia, and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               NOGO expression. The present
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           muscular dystrophy, and/or other neurodegenerative disease
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          sequence is a hammerhead ribozyme of the invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Sequence 17 BP; 7 A; 2 C; 4 G; 0 T; 4 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    the modulation
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Chowrira BM;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Claim 88; Page 76; 200pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 central nervous system injury
                                                                                                                                                                                                                                                                                                           09-FEB-2001; 2001WO-US004273.
                                                                                                                                                                                                                                                                                                                                                             2000US-0181797P
                                                                                                                                                                                                                                                                                                                                                                                      2000US-0185516P
                                                                                                                                                                                                                                                                                                                                                                                                          06-MAR-2000; 2000US-0187128P
                                                                                                                                                                                                                                                                                                                                                                                                                                                      (RIBO-) RIBOZYME PHARM INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Mcswiggen J,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            (CHOW/) CHOWRIRA B M.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    which respond
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     MCSWIGGEN J.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            WPI; 2001-607195/69
                                                                                                                                                                                                                WO200159103-A2.
                                                                                                                                                                                                                                                                                                                                                           11-FEB-2000;
28-FEB-2000;
                                                                                                                                               sapiens
                                                                                                                                                                                                                                                               16-AUG-2001
                                                                                                                                                                      Synthetic.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Blatt L,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           disease,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        MCSW/)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  BLAT/)
                                                                                                                                               Ношо
```

```
cytostatic; antiviral; neuroprotective; nootropic; neuroleptic; ss; primer; probe; tumour suppression; tumour reversion; apoptosis; virus resistance; transgenic animals; Alzheimer's disease; schizophrenia;
                                                                                                                                                                                                                                                                                                           New nucleic acid encoding human prostate membrane-specific antigen, useful e.g. for treatment of tumors and viral infection, also related polypeptide and antibodies.
                                                                      Tumour suppression/reversion associated nucleotide #668.
                                                                                                                                                                                                                                                                                                                                                          Disclosure; Page 110; 771pp; French.
                                                                                                                                                                                                                                                                         Tuijnder M;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      100.0%; Pre-
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   2857 GATCCTGCCATAGCAC 2872
ADB40345 standard; DNA; 17 BP.
                                                                                                                                                                                                                                                     (MOLE-) MOLECULAR ENGINES LAB.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                expression of the nucleotides.
                                                                                                                                                                                                          17-SEP-2002; 2002WO-IB004219.
                                                                                                                                                                                                                               17-SEP-2001; 2001FR-00011981
                                        (revised)
(first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Local Similarity 100.
les 16; Conservative
                                                                                                                                                                                                                                                                         Telerman A, Amson R,
                                                                                                                                                                                                                                                                                            WPI; 2003-441574/41.
                                                                                                                                                                  WO2003040369-A2.
                                                                                                                                             Homo sapiens.
                                       18-DEC-2003
04-DEC-2003
                                                                                                                                                                                      15-MAY-2003
                                                                                                                           diagnosis.
                   ADB40345;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Matches
         ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ch 0.3%; Score 16; DB 1; Length 17; 1 Similarity 100.0%; Pred. No. 3e+02; 16; Conservative 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Best Local Similarity
Matches 16; Conserv
```

```
The invention relates to the isolation of 6327 nucleotide sequences, fragments of at least 15 consecutive nucleotides of these nucleotides, a sequence having at least 08% identity, after optimal alignment, with the nucleotides, a sequence that hybridizes under stringent conditions with the nucleotides, or the complement, or corresponding RNA, of the concleotides the nucleotides are used as probes or primers for detecting, identifying, quantifying and/or amplifying nucleic acids, as in vitro sense and antisense sequences, of nucleotides involved in tumour suppression or reversibion, apoptosis and or viral resistance, to produce recombinant polypeptides, and to prepare transpenic animals, as experimental models. The nucleotides (also vectors containing them and calls containing the vectors), the encoded polypeptides and antibodies (Ab) against the polypeptide are useful for prevention and/or treatment of viral infections or diseases characterized by development of tumours or viral infections or diseases characterized by development of tumours or viral infections or diseases characterized by development of tumours or viral infections or diseases or schraderized by development of tumours or viral infections or diseases or schraderized by development of tumours or viral infections or diseases or schraderized by development of tumours or viral infections or diseases or schraderized by development of tumours or viral infections or diseases or schraderized by development of tumours or viral infections or diseases or schraderized by development or tumours or viral infections or diseases or schraderized by development or tumours or viral infections or diseases or schraderized by development or tumours or viral infections or diseases or schraderized by development or viral v
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Analysis of the expression of the nucleotides can be used for diagnosis and/or prognosis of these diseases. The nucleotides and polypeptides can also be used to screen for their specific interactive molecules,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Gapa
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   potentially useful for treating diseases associated with abnormal
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        0.3%; Score 16; DB 1; Length 1/,
100.0%; Pred. No. 3e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Sequence 17 BP; 4 A; 6 C; 4 G; 3 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1 GATCCTGCCATAGCAC 16
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   g
```

Query Match

AAV37774 standard; DNA; 20 BP.

(first entry)

09-SEP-1998

AAV37774:

```
The invention relates to the isolation of 6327 nucleotide sequences, fragments of at least 15 consecutive nucleotides of these nucleotides, a grequence having at least 80% identity, after optimal alignment, with the complement complement, with the nucleotides, a sequence that hybridizes under stringent conditions with the nucleotides. Or the complement, or corresponding RNA, of the the nucleotides. The nucleotides are used as probes or primers for detecting, contribying and/or amplifying nucleic acids, as in vitro identifying, quantifying and/or amplifying nucleic acids, as in vitro suppression or reversion, apoptosis and or viral resistance, to produce recombinant polypeptides, and to prepare transgenic animals, as recombinant polypeptides, and to prepare transgenic animals, as recombinant polypeptides, and to prepare transgenic animals, as recombining the vectors), the encoded polypeptides and antibodies calls containing the vectors), the encoded polypeptides and antibodies of viral infections or diseases characterized by development of tumours or cell degeneration (e.g. Alzheimer's disease or schizophrenia).

Analysis of the expression of the nucleotides and polypeptides can and or and/or prognosis of these diseases. The nucleotides and polypeptides can also be used to screen for their specific interactive molecules.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ö
                                                                                                                                                                                                                                                                                                        cytostatic; antiviral; neuroprotective; nootropic; neuroleptic; ss; primer; probe; tumour suppression; tumour reversion; apoptosis; virus resistance; transgenic animals; Alzheimer's disease; schizophrenia;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      New nucleic acid encoding human prostate membrane-specific antigen, useful e.g. for treatment of tumors and viral infection, also related polypeptide and antibodies.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           .
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             0.3%; Score 16; DB 1; Length 17;
00.0%; Pred. No. 3e+02;
ve 0; Mismatches 0; Indels
                                                                                                                                                                                                                                      Tumour suppression/reversion associated nucleotide #5480.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Sequence 17 BP; 6 A; 3 C; 1 G; 7 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Disclosure; Page 672; 771pp; French.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Tuljnder M;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             0.33,
100.0%; Pre-
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    expression of the nucleotides.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   (MOLE-) MOLECULAR ENGINES LAB.
                           ADB45157 standard; DNA; 17 BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 17-SEP-2001; 2001FR-00011981.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      17-SEP-2002; 2002WO-IB004219
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Query Match 0.3
Best Local Similarity 100.
Matches 16; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 relerman A, Amson R,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       WPI; 2003-441574/41.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              WO2003040369-A2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Homo sapiens.
                                                                                                                                                                                       18-DEC-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                15-MAY-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                 diagnosis.
                                                                                                         ADB45157
ADB45157,
```

```
Analytical solid phase for detecting nucleic acids - contains a base sequence which hybridises with polynucleotide sequence of the target, and a set of probes immobilised on the solid phase via a linker.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         The present sequence represents a probe used in an example from the present invention. The present invention describes an analytical solid phase method for detecting nucleic acids. The method comprises obtaining a base sequence which hybridises with the polynucleotide sequence of the target, and a set of probes immobilised on the solid phase via a linker which is enzymatically ligated during hybridisation. The product is used for the detection of specific nucleic acids. Possible fields of sepplication include diagnosis of disease, detection of drug sensitivity, screening for appropriate transplantation organs, testing in the food industry to prevent food poisoning. A simple, quick method for selectively detecting target in a mixed sample is obtained
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             5'-phosphorylated and 3'-biotinylated probe (Seq ID No: 5 of WO9935287).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Two-probe system; nucleic acid detection; hybridisation; immobilisation; phosphorylation; diagnosis; infectious disease; drug receptor; toxin;
                                                                                                             Analytical solid phase; detection; hybridisation; probe; target; disgnosis; screening; disease; drug sensitivity; transplantation organ; food industry; food poisoning; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Gaps
                                                                                Analytical solid phase nucleic acid detection hybridisation probe A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       . Match 0.3%; Score 16; DB 1; Length 20; Local Similarity 100.0%; Pred. No. 3.1e+02; les 16; Conservative 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Sequence 20 BP; 2 A; 7 C; 7 G; 4 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                            (MOLE-) LAB MOLECULAR BIOPHOTONICS.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Example 1; Page 13; 37pp; Japanese.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AAX89313 standard; DNA; 20 BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1 GGATCCCCCGGGCTGC 16
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  organ transplant; probe; ss.
                                                                                                                                                                                                                                                                                                            96JP-00243720.
                                                                                                                                                                                                                                                                                 97WO-JP003232.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                WPI; 1998-271664/24.
                                                                                                                                                                                                                                                                                                                                                                               Sato Y;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           21-SEP-1999
                                                                                                                                                                                                                                                                                                                   13-SEP-1996;
                                                                                                                                                                                                                                                                                     12-SEP-1997;
                                                                                                                                                                                                                       WO9811210-A1
                                                                                                                                                                                                                                                      19-MAR-1998.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Synthetic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AAX89313;
                                                                                                                                                                                       Synthetic.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Query Match
                                                                                                                                                                                                                                                                                                                                                                                 Abe S,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                RESULT 418
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AAX89313
ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               셤
```

; 0

4929 TTGTATTGAAAAAGAT 4944

ð

RESULT 417 AAV37774

```
(HODG/) HODGE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         22-APR-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     08-JAN-2004.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Synthetic.
                                                                         Hodge TA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ADI35091;
                                                                                                                                                                                                                                                                                                                                                                                                                                                    Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Aatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   RESULT 420
 ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            target polynucleotide sequence. The system consists of two probes are which hybridise to adjacent sections of the target polynucleotide. These are immobilised by their 5' and 3' ends respectively to a solid phase and the free end of one is phosphorylated. One probe is labeled and is connected to the solid phase via a breakable section. The test sample is introduced and after hybridisation to the target polynucleotide sequence (if present) a ligase is added to join the non-immobilised ends of the probes. The target polynucleotide chain is removed, and the breakable section split. If the target sequence was present, the labeled probe remains immobilised to the solid phase because of ligation to the other probe, but if the target sequence was not present it is released. Detection of the label on the solid phase shows that the target sequence was present in the test sample. The method is used for the datection of specific nucleotide sequences in applications such as the diagnosis of infectious and other diseases, the detection of drug receptors, and is able to discriminate the target sequence from sequences containing a single base mismatch is sequence and sequences containing a single base mismatch is sequence and sequences containing a single base mismatch is represent probes and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Method for screening genomic DNA; target sequence; transgenic screening; organism identification; targeted mutagenesis screening method;
                                                                                                                                                                                                                                     The invention describes a two-probe system for specific detection of a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Gaps
                                                                                                                                                                         Two-probe system for specific detection of target polynucleotide
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        DB 1; Length 20; 3.1e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         target sequences used in the method of the invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Sequence 20 BP; 2 A; 7 C; 7 G; 4 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Streptomyces hygroscopicus hygromyycin probe.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        0.3%; Score 16; DB 100.0%; Pred. No. 3.1 ative 0; Mismatches
                                                                                                 (MOLE-) LAB MOLECULAR BIOPHOTONICS.
                                                                                                                                                                                                             Example; Page 70; 75pp; Japanese.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          16
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        04-SEP-2001; 2001WO-US027404.
                                               99WO-JP000041
                                                                        98JP-00002482
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               GGATCCCCCGGCTGC 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Streptomyces hygroscopicus.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ABK50593 standard; DNA; 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1 GGATCCCCCCGGGCTGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Query Match 0.3
Best Local Similarity 100.
Matches 16; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        hygromycin; probe; ss.
                                                                                                                                                WPI; 1999-430406/36
                                                                                                                         Kodama H;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        WO200220842-A1.
WO9935287-A1
                                               08-JAN-1999;
                                                                        08-JAN-1998;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              30-JUL-2002
                        15-JUL-1999
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 14-MAR-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ABK50593;
                                                                                                                                                                                       seguence.
                                                                                                                         Abe S,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      RESULT 419
ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          PXBXBXEXEXPXPX
```

```
The present invention relates to a method and apparatus for transgenic and targeted mutagenesis screening of genomic DNA. The method comprises depositing genomic DNA on a substrate, adding at least one labelled probe specific for a portion of the genomic DNA, and detecting the signal from the probe. The invention also provides a system for screening DNA for a designated genetic sequence, the system includes a computer having a processor, memory, web browser and an automatic screening device that analyses samples of genomic DNA for the designated sequence. The method is useful for detecting a designated genetic sequence. The method is useful for detecting a designated genetic sequence in a sample of genomic DNA. The method is useful for tapid identification of an organism, whose genome possesses specific genetic sequences that exist endogenously or has been modified, mutated or genetically engineered. The method is more accurate, faster and is a high volume transgenic and targeted mutagenesis screening method. The screening results are provided to a researcher more quickly than by the prior art methods. The present sequence for Streptomyces hygroscopicus hygromycin probe is used in the
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ô
                                                                                                                                                                                                                                                                                                                                         Detecting designated genetic sequence in genomic DNA sample, comprises depositing genomic DNA on substrate, adding labeled probe specific for portion of DNA and detecting signal from labeled probe.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Gape
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     PLA2G1B; fat deposition; leanness; single nucleotide polymorphism; non-insulin dependent diabetes mellitus; NIDDM; hypertinsulinemia; hypertension; glucose intolerance; dyslipidemia; hypercoagulability; microalbuminuria; human; PCR; primer; ss; SNP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Length 20;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          0; Indela
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Human PLA2G1B gene fragment amplifying first PCR primer.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Sequence 20 BP; 5 A; 4 C; 5 G; 6 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Score 16; DB 1; Lost Pred. No. 3.1e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  100.0%; Pred. ...
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Example 2; Page 54; 126pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         methods of the present invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1625
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ADI35091/c
ID ADI35091 standard; DNA; 20 BP.
06-SEP-2000; 2000US-0230371P. 04-SEP-2001; 2001US-00230371.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                27-JUN-2003; 2003WO-US020830.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        27-JUN-2002; 2002US-0392361P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           2 AGGATTTGGGCAACAT 17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  0.3%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1610 AGGATTTGGGCAACAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              16; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    (SEQU-) SEQUENOM INC
                                                                                                                                                                                                                                                                 WPI; 2002-371884/40.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Local Similarity
                                                                                                            T A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           WO2004002295-A2.
```

```
The invention relates to diagnosing a predisposition to fat deposition or leanness in a subject comprising detecting the presence or absence of a polymorphic variation associated with fat deposition at a polymorphic site in a PLA2GIB nucleotide sequence in a nucleic acid sample from a subject, where the presence of the polymorphic variation is a guanne at position 7138 or thymine at position 9182 of the present sequence. The method is useful for diagnosing a the present sequence. The method is useful for diagnosing a predisposition to fat deposition or learness in a subject, and consequently for diagnosing a predisposition to non-insulin dependent diabetes mellitus (NIDDM) in a subject and conditions such as hypertension, glucose intolerance, dyslipidemia, hypertension, glucose intolerance, dyslipidemia, hypertension of preventive measures. Sequences ADI35084-ADI3503 represent PCR primers used in assays for verifying and genotyping single nucleotide polymorphism (SNP)s in a human PLA2GIB nucleotide sequence.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             human; PCR; ss; fat reduction; fat deposition; phospholipase A2; PLA2GlB; appetite suppressant; lipase inhibitor; exercise regimen; obesity; non-insulin dependent diabetes mellitus; NIDDM; cardiovascular disorder; hypertension; antidiabetic; primer.
                                                         Diagnosing a predisposition to fat deposition or leanness, useful for diagnosing a predisposition to e.g. diabetes or hypertension, comprises detecting the presence of a polymorphism in the PLA2GIB nucleic acid from
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Identifying a candidate therapeutic for fat reduction, useful for treating diabetes, by introducing a test molecule to a system comprising
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   PCR primer 8 to genotype SNPs of human phopholipase A2 (PLA2G1B) DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Cantor C;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    0.3%; Score 16; DB 1; Length 20; (00.0%; Pred. No. 3.1e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Dennis E,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Sequence 20 BP; 7 A; 4 C; 6 G; 3 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   100.0%; Prec. ...
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Denissenko MF,
                                                                                                                                                     Example 2; Page 45; 91pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              3760 GCTGTCCAGCTTCTTG 3775
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ADJ09992 standard; DNA; 20 BP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     27-JUN-2003; 2003WO-US020831
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          27-JUN-2002; 2002US-0392362P
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               GCTGTCCAGCTTCTTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Local Similarity 100.
les 16; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Langdown ML,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             (SEQU-) SEQUENOM INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            WPI; 2004-071944/07.
Langdown
                             WPI; 2004-082843/08.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   WO2004002296-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         17-JUN-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        08-JAN-2004
                                                                                                                         the subject.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Adam GIR,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  16
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ADJ09992;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Rubin B;
Adam GIR,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Best Loca
Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      RESULT 421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Homo
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  엄
```

ô

Gaps ö

```
This invention relates to a novel candidate therapeutic agent useful for far teduction and disorders related to fat depositions. Specifically, it refers to polymorphic variations in the phospholipase A2 (PLAZGIB) DNA, which is located on chromosome 1224 and has been associated with central cf at deposition. The present invention describes methods to detect the presence or absence of these single nucleotide polymorphisms of PLAZGIB, comparessant, and T918A3 and T918A3G, and subsequently provide treatment that reduces fat deposition. This treatment may consist of an appetite cuppressant, a lipase inhibitor, a phospholipase inhibitor, an exercise creduces fat deposition. This treatment may consist of an appetite crediment, a lipase inhibitor, a phospholipase inhibitor, an exercise regimen, addersary regimen, psychological counselling, psychotherapy or a crediment diabetes mellitus (NIDDM), as target for reducing fat deposition and it can be used to treat both obesity and non-insulin can be used to treat both obesity and non-insulin such as hypertension. As such, it exhibits antidiabetic activity. This oligonucleotide sequence is a PCR primer used to amplify a region of interest (i.e. genotype SNPs) in human PLAZGIB DNA of the invention.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Human, matrix metalloproteinase 11; MMP11; ss; antisense oligonucleotide;
phosphorothioate linkage; 2'-0-methoxyethyl sugar moiety;
5-methylcytosine; hyperproliferative disorder; cancer; cytostatic.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   The invention relates to a compound targeted to a nucleic acid molecule encoding a matrix metalloproteinase 11 (MMP11) polypeptide. The compound is an antisense oligonucleotide that specifically hybridises with the nucleic acid and inhibits expression of the polypeptide. The antisense
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  New oligonucleotide compound that inhibits expression of matrix metalloproteinase 11, useful for preparing a composition for treating hyperproliferative disorder, e.g., cancer.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Human matrix metalloproteinase 11 DNA antisense oligonucleotide #27.
PLA2G1B protein or nucleic acid, and determining the presence of interaction between the compounds.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                0.3%; Score 16; DB 1; Length 20; 000.0%; Pred. No. 3.1e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                           Sequence 20 BP; 7 A; 4 C; 6 G; 3 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     100.0%; Pred. .v.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Example 15; SEQ ID NO 44; 76pp; English.
                                                                 English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       3760 GCTGTCCAGCTTCTTG 3775
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  10-DEC-2002; 2002US-00316755.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          10-DEC-2002; 2002US-00316755
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ADP27118 standard; DNA; 20
                                                                 Example 2; Page 70; 116pp;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         26-AUG-2004 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          gererecagerrerre
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 16; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        (ISIS-) ISIS PHARM INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Cowsert LM;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      WPI; 2004-440341/41.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 US2004110152-A1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         10-JUN-2004.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Baker BF,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ADP27118;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               16
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              RESULT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               셤
```

; 0

```
ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 /mod_base= OTHER // Anote // Mode= MoTHER phosphorothicate nucleotide. All cytosines // fnote= "MOTHER= phosphorothicate nucleotide. And 15 to 20 are 2'-methoxysethyl nucleotides."
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                The present invention relates to antisense compounds, compositions and methods for modulating the expression of kinesin-like 1. The superfamily of kinesins function as molecular engines to bind and transport vesicles
oligonucleotide comprises at least one modified internucleoside linkage 1.e. a phosphorothicate linkage, at least one modified sugar moiety, preferably a 2'-O-methoxyethyl sugar moiety, or at least one modified nucleobase comprising a 5-methylxytosine. The antisense compounds are useful for modulating the expression of the MMP11 polypeptide and in preparation of a composition for treating hyperpoiliferative disorders, e.g. cancer. This sequence represents an antisense oligonucleotide targeted to DNA encoding the human MMP11 polypeptide of the invention.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Antisense; kinesin-like 1; N2 kinesin; bimC kinesin; cellular proliferation; cancer; B-cell leukaemia; autoimmune disease; carpal tunnel syndrome; Raynaud's phenomenon; systemic sclerosis; Sjorgren's syndrome; rheumatoid arthritis; polymyositis; polyarteritis; systemic lupus erythematosus; mouse; ss; human.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                New antisense compound 8 to 80 nucleobases in length targeted to a nucleic acid molecule encoding kinesin-like 1, useful for treating an animal having a disease or condition such as cancer, tumor, autoimmune
                                                                                                                                                                                                                     Gaps
                                                                                                                                                                                                                     ..
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Antisense oligo targeted to mouse kinesin-like 1, ISIS 285762.
                                                                                                                                                                                 DB 1; Length 20
                                                                                                                                                                                                                 0; Indels
                                                                                                                                                  Sequence 20 BP; 3 A; 8 C; 6 G; 3 T; 0 U; 0 Other;
                                                                                                                                                                                                  3.1e+02;
                                                                                                                                                                                         100.0%; Pred. ...
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Claim 36; SEQ ID NO 233; 110pp; English.
                                                                                                                                                                                 0.3%; Score 16;
00.0%; Pred. No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                    BP
                                                                                                                                                                                                                                                   62
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  17-NOV-2003; 2003US-00714796
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  23-MAY-2002; 2002US-00156603
                                                                                                                                                                                                                                                                                  16 recresecrecacca 1
                                                                                                                                                                                                                                                                                                                                                                    ADR72469 standard; DNA; 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    l. .20
/*tag= a
                                                                                                                                                                                                                                                                                                                                                                                                                                  (first entry)
                                                                                                                                                                                                                                                  47 TGCTGGGGCTGCAGCA
                                                                                                                                                                                                                   16; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Koller E;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   WPI; 2004-652550/63
                                                                                                                                                                                 Query Match
Best Local Similarity
Matches 16; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 (DOBI/) DOBIE K W. (KOLL/) KOLLER E.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   US2004180847-A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  musculus.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  modified base
                                                                                                                                                                                                                                                                                                                                                                                                                                  02-DEC-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   16-SEP-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Synthetic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Dobie KW,
                                                                                                                                                                                                                                                                                                                                                                                                   ADR72469;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   disease.
                                                                                                                                                                                                                                                                                                                                    RESULT 423
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Ношо
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Mus
   8888888888888
                                                                                                                                                                                                                                                                                셤
                                                                                                                                                                                                                                                                                                                                                                    ઠે
```

```
and organelles along microtubules using energy supplied by ATP. Kinesin-

like 1, a member of the N2 (also called bimC) family of kinesins, is

involved in separating the chromosomes by directing their movement along

microtubules in the bipolar spindle. Kinesin-like 1 is also known as

KNSL1, Eg5, HsEg5, HKSP, KIFI1, thyroid interacting protein 5 and TRIPS.

CIMIDISTION of Kinesin-like 1 may be a target for arresting cellular

CP proliferation in cancer, due to its central role in mitosis. Expression

of kinesin-like 1 expression may contribute to other disease states such

CR and a B-cell leukaemia, autoimmune diseases such as carpal tunnel syndrome,

CR arthritis, polymyositis and polyarteritis. Kinesin-like 1 is an

crates to antisense nucleic acid oligomers, targeted to the gene

caucontigen identified in systemic lupus erythematosus. The invention

cralates to antisense nucleic acid oligomers, targeted to the gene

cancoding kinesin-like 1. Aleas to provided are methods of screening for

modulators of kinesin-like 1 and to methods of modulating the expression

of kinesin-like 1. At least a portion of the compound hybridises with RNA

croform an oligonucleotide-RNA duplex. It has at least one

croform an oligonucleotide-RNA duplex. It has at least one

croform an oligonucleotide-RNA duplex. It has at least one

croform an oligonucleotide and molety, or nucleobase. It has at least one

cromethoxyethyl sugar molety, phosphorothicate internucleoside linkage,

cromethoxyethyl sugar molety, phosphorothicate internucleoside linkage,

cromethoxyethyl sugar molety, prophorothicate internucleoside linkage,

cromethoxyethyl sugar molety, phosphorothicate internucleoside linkage,

cromethoxyethyl sugar molety, prophorothicate internucleoside linkage,

cromethoxyethyl sugar molety, with a 3'-unranalated region (UTR), with a seal of moletic acid molecule encoding kinesin-like

conjugunder of a nucleic acid molecule encoding kinesin-like

changes an antisense mucleis acid molecule encoding kinesin-like

coligonucleotide
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Oligonucleotides were synthesised via solid phase P(III) phosphoramidite chemistry. The present sequence is an antisense oligo targeted to mouse
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Endothelial monocyte acitivating peptide; EMAP-II; antagoniat; antibody;
treatment; therapy; ischaemic reperfusion injury;
bronchopulmonary dysplasia; 88.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Facilitating vascular growth for treating ischemic reperfusion injury in lungs and bronchopulmonary dysplasia of new born babies comprises inhibiting endothelial monocyte activating polypeptide.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              0.3%; Score 16; DB 1; Length 20; 00.0%; Pred. No. 3.1e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Sequence 20 BP; 5 A; 8 C; 3 G; 4 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             100.0%; Prec. ...
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              (CHIL-) CHILDRENS HOSPITAL LOS ANGELES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Primer for amplifying murine SP-C.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            3488 CACCACCACCTGGATG 3503
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            SA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AAZ93879 standard; DNA; 21 BP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       5 CACCACCACCTGGATG 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  99WO-US026743.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                98US-0108435P
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Gebb
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     29-AUG-2000 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              16; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Zhang F,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     WPI; 2000-399730/34.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      WO200029620-A1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       kinesin-like
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  12-NOV-1999;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              13-NOV-1998;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       25-MAY-2000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Schwarz M,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Synthetic.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AAZ93879;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              RESULT 424
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AAZ93879
            %$9$9$9$9$9$9$9$9$9$9$9$9$9$9$
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              à
```

```
WPI; 1998-229819/20.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            03-JAN-1996;
                                                                                                                                                                                                                                                                                                                                                                                           Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  03-JAN-1996;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    US5733732-A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        31-MAR-1998
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Piccolo F,
                                                                                                                                                                                                                                                                                AAV22621;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Sunada Y;
                                                                                                                                                                                                        20
                                                                                                                                         Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                         mutation
                                                                                                                                                              Matches
                                                                                                                                                                                                                                        RESULT 426
                                                                                                                                                                                                                                                                                                                                                                                                                Key
                                                                                                                                                                                                                                                    AAV22621
  8888888888888888
                                                                                                                                                                                   ઠે
                                                                                                                                                                                                       유
                                                                                                                                                                                                                                                              ö
                   A new method for facilitating vascular growth is described which comprises inhibiting endothelial monocyte activating polypeptide (EMAP) II by down-regulating EMAP II expression, or by using EMAP II receptor antagonists or compounds that specifically bind to EMAP II e.g. antibodies. The method is useful treating patients at risk for ischaemic reperfusion injury to the luggs and newborn babies affected with bronchopulmonary dysplasia (claimed)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               The present invention provides a method of diagnosing a vascular disease in an individual, involving determining the sequence at various polyworphic sites within the human thrombospondin 1 and thrombospondin 4 genes. The sequences at a number of polymorphic sites are also provided
                                                                                                                                                                                                                                                                                                                                            Human; variant thrombospondin 1; variant thrombospondin 4; SNP; polymorphism; vascular disease; coronary artery disease; forensics; myocardial infarction; atherosclerosis; stroke; venous thromboembolism; pulmonary embolism; paternity test; ds.
                                                                                                                                                    Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Mccarthy JJ;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Nucleic acids comprising single nucleotide polymorphisms, useful in applications such as forensics, paternity testing, medicine, genetic analysis and phenotype correlations to diseases such as diabetes and atherosclerosis.
                                                                                                                                                                                                                                                                                                                                                                                                                                                          /*tag= a
/standard_name= "Single nucleotide polymorphism"
                                                                                                                                                    ö
                                                                                                                            0.3%; Score 16; DB 1; Length 21;
00.0%; Pred. No. 3.2e+02;
                                                                                                                                                   Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Daley GQ,
                                                                                                         Sequence 21 BP; 4 A; 5 C; 5 G; 7 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                          Human gene single nucleotide polymorphism #262.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Bolk S,
                                                                                                                                    100.0%; Preq. ...
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              (WHED ) WHITEHEAD INST BIOMEDICAL RES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Ireland JS,
                                                                                                                                                                                                                                                                                                                                                                                                                                   Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Example; Page 67; 242pp; English.
                                                                                                                                                                       2988 GAGCCATCTTCATGAT 3003
 Example 1; p15; 41pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     10-SEP-1999; 99US-0153357P.
26-JUL-2000; 2000US-0220947P.
16-AUG-2000; 2000US-0225724P.
                                                                                                                                                                                            20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                07-SEP-2000; 2000WO-US024503,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          (MILL-) MILLENNIUM PHARM INC
                                                                                                                                                                                                                                                 AAF95501 standard; DNA; 21
                                                                                                                                                                                   GAGCCATCTTCATGAT
                                                                                                                                                                                                                                                                                          (revised)
(first entry)
                                                                                                                                         Local Similarity 100.
16s 16; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Gargill M,
                                                                                                                                                                                                                                                                                                                                                                                                                                                        /*tag=
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   WPI; 2001-226749/23.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       WO200118250-A2
                                                                                                                                                                                                                                                                                                                                                                                                    Homo sapiens
Unidentified
                                                                                                                                                                                                                                                                                          18-NOV-2004
06-JUN-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            15-MAR-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ES,
                                                                                                                                                                                                                                                                                                                                                                                                                                    Key
variation
                                                                                                                                                                                                                                                                      AAF95501;
                                                                                                                             Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Lander
                                                                                                                                         Best Loca
Matches
                                                                                                                                                                                                                            RESULT 425
8$88888888888888
                                                                                                                                                                       ð
                                                                                                                                                                                           셤
```

```
ö
in the specification. In particular, the method can be used in the diagnosis of atherosclerosis, myocardial infarction, coronary heart disease, stroke, peripheral vascular diseases, venous thromboembolism and pulmonary embolism. Single nucleotide polymorphisms (SNPs) are also useful in forensics, paternity testing, genetic analysis and phenotype correlations to disease. The present sequence is an example of one of the human gene SNPS shown in the specification
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          is from exon 5 and contains a mutation which causes a nonsense codon at position 151 (AAV25622 is the normal wild type sequence). Adhalin belongs for the sarcolemal complex of dystrophin-associated proteins. Mutations in the adhalin protein are one of the causes of muscular dystrophy. A new method for the detection of a mutation in the human adhalin gene, comprises incubating a sample with a nucleic acid probe (e.g. present sequence). The probe specifically hybridises to the mutant form of the gene but not the wild type. Any specific hybridisation is then detected. The method is useful for detecting mutations in the human adhalin gene
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Genetic detection of primary adhalinopathies - using nucleic acid probes which bind to mutant adhalin genes but not the wild type gene.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               The present sequence represents a fragment of the human adhalin gene. It
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Human; adhalin gene; dystrophin-associated protein; muscular dystrophy; detection; mutation; primary adhalinopathy; Duchenne-like autosomal recessive muscular dystrophy; probe; ds.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Adhalin gene fragment showing a muscular dystrophy causing mutation.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ..
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Campbell KP;
                                                                                                                                                                                                                                                                                                      Revised record issued on 18-NOV-2004 : The variantion feature
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Length 21;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Score 16; DB 1; Le:
Pred. No. 3.2e+02;
0; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Jeanpierre M, Roberds SL,
                                                                                                                                                                                                                                                                                                                                                                                                                  Sequence 21 BP; 0 A; 8 C; 4 G; 9 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ē
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       /*tag= a
/note= "wild type C changed to
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               100.08;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Claim 1; Col 17; 14pp; English.
                                                                                                                                                                                                                                                                                                                                        incorrectly given a captial V
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AAV22621 standard; DNA; 19 BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           181 AGAGGAAGACGAGGCC 196
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               96US-00582539.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        96US-00582539
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  (IOWA ) UNIV IOWA RES FOUND.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AGAGGAAGACGAGGCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     08-JUL-1998 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Local Similarity 100.
les 16, Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Kaplan J,
```

```
ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AAZ65654 to AAZ69578 represent human biallelic markers from the present invention, which contain a polymorphic base at position 24 of their nucleotide sequences. AAZ69579 to AAZ7401 represent amplification primers for the biallelic markers. The biallelic markers of the invention have a variety of uses: they can be used for high density mapping of the human genome, and in complex association studies and haplotyphag studies which are useful in determining the genetic basis for disease states. Compositions and methods of the invention can also be useful for the identification of the targets for the development of pharmaceutical agence and diagnostic methods, as well as the characterisation of the dispension of a side effects from differential efficacious responses to and side effects from
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  pharmaceutical agents acting on a disease as well as other treatment. N.B. The SEQ ID NOs 2852, 2913, 2974, 3035, 3096, 3157, 3227, 3297 and 3367, are not actually given a sequence in the Sequence Listing from the
 primary adhalinopathy, a Duchenne-like autosomal recessive
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Novel biallelic markers used to construct a high density disequilibrium
                                                                                                                               Gaps
                                                                                                                                                                                                                                                                                                                                                                                                      Human biallelic marker upstream amplification primer SEQ ID NO:4157
                                                                                                                                                                                                                                                                                                                                                                                                                                        Human genome, biallelic marker; high density disequilibrium map; genomic map; haplotype; phenotype; polymorphic base; genotyping; haplotyping; hybridisation; identification; characterisation; amplification; single nucleotide polymorphism; SNP; PCR primer;
                                                                                                                               ö
                                                                                     0.3%; Score 15.8; DB 1; Length 19; 89.5%; Pred. No. 3.2e+02; ive 0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Sequence 19 BP; 7 A; 6 C; 4 G; 2 T; 0 U; 0 Other;
                                                     Sequence 19 BP; 3 A; 8 C; 4 G; 4 T; 0 U; 0 Other
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Claim 8; Page 1117; 2745pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Chumakov I;
                                                                                                                                                                4171 GCAGCTGTTCAGGGCAACA 4189
                                                                                                                                                                                                  19 GCAGGTGTTCAGGGCAGCA 1
                                                                                                                                                                                                                                                                                         AAZ69801 standard; DNA; 19 BP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    98US-0082614P.
98US-0109732P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  99WO-IB000822
                                                                                                                                                                                                                                                                                                                                                                  (first entry)
                                                                                                        Local Similarity 89.5
108 17; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Cohen D, Blumenfeld M,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         map of the human genome
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   WPI; 2000-013267/01.
                   muscular dystrophy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             present invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         (GEST ) GENSET
which lead to
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     diagnosis; ss
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         WO9954500-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  21-APR-1999;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    21-APR-1998;
23-NOV-1998;
                                                                                                                                                                                                                                                                                                                                                                  10-SEP-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             28-OCT-1999
                                                                                                                                                                                                                                                                                                                                AAZ69801;
                                                                                       Query Match
                                                                                                                                                                                                                                                       RESULT 427
                                                                                                                           Matches
ន្តដ្ឋនូ
                                                                                                                                                                                                                                                                                         ઠે
```

Gaps

ö

0.3%; Score 15.8; DB 1; Length 19; 89.5%; Pred. No. 3.2e+02; ive 0; Mismatches 2; Indels

17; Conservative

Best Local Similarity Matches 17; Conserv

Query Match

```
The invention relates to short interfering nucleic acids (siNA) which downregulate expression of HIV gene by RNA interference. The siNAs may or may not comprise ribonuclectides and may be double or single stranded.

They further comprise sense and any be double or alternatively are assembled from a sense oligonuclectide and an antisense oligonuclectide. Specifically, the siNAs include short interfering RNA (siRNA), doublestranded RNA, micro-RNA (miRNA) and short hairpin RNA (shRNA). The siNAs can be unmodified or chemically modified, can contain deoxyribonuclectides, and can be chemically synthesised, expressed from a cetor or enzymatically synthesised. The invention also relates to kite for the in vitro or in vivo delivery of siNA; conjugates and/or complexes of siNA; and vectors that express siNA. The siNAs are used to modulate expression of the HIV gene in cells, tissue explants or organisms (e.g., by ex vivo gene therapy), or in grafts and transplants for the treatment of a variety of conditions. HIV siNAs have anti-HIV activity. They may be used for inhibiting replication of HIV and may be used to treat HIV
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   New double-stranded short interfering nucleic acid, useful for treating infection with human immune deficiency virus, comprises sugar-modified
                                                                                                                                                                                                                                                               RNA interference; short interfering nucleic acid; siNA; shRNA; short interfering RNA; siRNA; double-stranded RNA; micro-RNA; miRNA; short interfering RNA; shRNA; expression modulation; gene therapy; drug screening; diagnosis; therapeutic target identification; pharmacogenomics; gene function analysis; gene mapping; HIV; anti-HIV; HIV replication inhibition; HIV infection; ss; target sequence.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Example 3; SEQ ID NO 100; 170pp; English.
                                                                                                                                                                                                                             HIV BINA oligonucleotide SEQ ID NO:100.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Macejak D;
3884 CTGGAGCACAGTCTGTTCT 3902
                    19 CTGGAGCTGAGTCTGTTCT 1
                                                                                                                                                                                                                                                                                                                                                                                                                Human immunodeficiency virus 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          SIRNA THERAPEUTICS INC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          2002US-0374722P

2002US-00157880

2002US-0386788P

2002US-038638P

2002US-00225023

2002US-0408378P
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           2002US-0358580P.
2002US-0363124P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        2003US-0440129P
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       20-FEB-2003; 2003WO-US005190
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         .0409293P
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Mcswiggen J, Beigelman L,
                                                                                                                       ADG35257 standard; RNA; 19
                                                                                                                                                                                            26-FEB-2004 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   WPI; 2003-679850/64.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       2002US-
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              MCSWIGGEN J.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        pyrimidine bases.
                                                                                                                                                                                                                                                                                                                                                                                                                                                WO2003070193-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   21-AUG-2002;
29-AUG-2002;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      15-JAN-2003;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               29-MAY-2002;
06-JUN-2002;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  23-JUL-2002;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      05-SEP-2002;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     09-SEP-2002;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               11-MAR-2002;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              22-APR-2002;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     28-AUG-2003
                                                                                                                                                                                                                                                                                                                                                                                              Synthetic.
                                                                                                                                                          ADG35257;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           (SIRN-)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              (MCSM/)
                                                                                       RESULT 428
                                                                                                    ADG35257
8 6
```

```
The invention relates to short interfering nucleic acids (siNA) which downregulate expression of HIV gene by RNA interference. The siNAs may or may not comprise ribonucleotides and may be double or single stranded. They further comprise sense and antisense regions, or alternatively are
                                                                                                                                                                   ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       New double-stranded short interfering nucleic acid, useful for treating infection with human immune deficiency virus, comprises sugar-modified pyrimidine bases.
                                                            ç
                                                                                                                                                                                                                                                                                                                                                                                                                        RNA interference; short interfering nucleic acid; siNA; short interfering RNA; siRNA; double-stranded RNA; micro-RNA; miRNA; short hairpin RNA; shRNA; expression modulation; gene therapy; diagnosis; therapeutic target identification; pharmacogenomics; gene function analysis; gene mapping; HIV; anti-HIV; HIV replication inhibition; HIV infection; ss.
infection. The siNAs are also useful for drug screening, diagnosis, therapeutic target identification and validation, genetic engineering, pharmacogenomics, studying gene function, and gene mapping (e.g., of single nucleotide polymorphisms). The present sequence represents the upper strand of HUV-targeted double-stranded siNA, which is identical the HIV transcript target sequence.
                                                                                                                                                                 Gaps
                                                                                                                                                                   ;
                                                                                                                                    Score 15.8; DB 1; Length 19;
Pred. No. 3.2e+02;
                                                                                                                                                                   Indels
                                                                                                         Sequence 19 BP; 6 A; 6 C; 4 G; 0 T; 3 U; 0 Other;
                                                                                                                                      Query Match
0.3%; Score 15.8; D
Best Local Similarity 73.7%; Pred. No. 3.2e
Matches 14; Conservative 3; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Example 3; SEQ ID NO 838; 170pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                   HIV siNA oligonucleotide SEQ ID NO:838.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Beigelman L, Macejak
                                                                                                                                                                                                   4405 GCAGGAAGTACTAGTTCCC 4423
                                                                                                                                                                                                                     Human immunodeficiency virus 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             THERAPEUTICS INC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        2002US-0363124P.
2002US-0374722P.
2002US-00157580.
2002US-0386782P.
                                                                                                                                                                                                                                                                                                             ADG35995 standard; RNA; 19 BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     2002US-0398036P.
2002US-00225023.
2002US-0406784P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  2002US-0408378P.
2002US-0409293P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                2003US-0440129P
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               20-FEB-2003; 2003WO-US005190
                                                                                                                                                                                                                                                                                                                                                                         (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     WPI; 2003-679850/64.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            (MCSW/) MCSWIGGEN J.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      WO2003070193-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                (SIRN-) SIRNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          22-APR-2002;
29-MAY-2002;
06-JUN-2002;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     21-AUG-2002;
29-AUG-2002;
05-SEP-2002;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Mcswiggen J,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                15-JAN-2003;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     09-SEP-2002;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             20-FEB-2002;
11-MAR-2002;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        23-JUL-2002;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   28-AUG-2003
                                                                                                                                                                                                                                                                                                                                                                         26-FEB-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Synthetic
                                                                                                                                                                                                                                                                                                                                             ADG35995;
                                                                                                                                                                                                                                                                                   RESULT 429
                                                                                                                                                                                                                                                                                                                 888888888
                                                                                                                                                                                                                                   셤
```

```
cssembled from a sense oligonucleotide and an antisense oligonucleotide.

Specifically, the siNAs include short interfering RNA (siRNA), doublestranded RNA, micro-RNA (miRNA) and short hairpin RNA (shRNA). The siNAs can be unmodified or chemically modified, can contain.

Cc can be unmodified or chemically synthesised, expressed from a ceoxyribonucleotides, and can be chemically synthesised, expressed from a vector or enzymatically synthesised. The invention also relates to kits cort in twitro or in two delivery of siNA; conjugates and/or complexes of siNA; and vectors that express is siNA. The siNAs are used to modulate cort siNA; and vectors in grafts and transplants for the treatment by ex vivo gene therapy), or in grafts and transplants for the treatment cort avaitety of conditions. HIV siNAs have anti-HIV activity. They may be used for inhibiting replication of HIV and may be used to treat HIV infection. The siNAs are also useful for drug screening, diagnosis, infection. The siNAs are also useful for drug screening, diagnosis, cherapeutic target identification and validation, genetic engineering, pharmacogenomics, studying gene function, and gene mapping (e.g., of single nucleotide polymorphisms). The present sequence represents the cort of lower strand of an HIV-targeted double-stranded sinA.
                                                                                                                                                                                                                                                                                                                                                                                                                                 ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     RNA interference; short interfering nucleic acid; siNA; short interfering RNA; siRNA; double-stranded RNA; micro-RNA; miRNA; short hairpin RNA; shRNA; expression modulation; gene therapy; drug screening; diagnosis; therapeutic target identification; pharmacogenomics; gene function analysis; gene mapping; cancer; cytostatic; human; oncogene; epidermal growth factor receptor; EGFR;
                                                                                                                                                                                                                                                                                                                                                                                                                                   Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                   ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Jamison S;
                                                                                                                                                                                                                                                                                                                                                                                            Score 15.8; DB 1; Length 19; Pred. No. 3.2e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                   2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Human HER2 (EGFR2) siNA lower strand, SEQ ID NO:496.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Fosnaugh K,
                                                                                                                                                                                                                                                                                                                                                      Sequence 19 BP; 3 A; 4 C; 6 G; 0 T; 6 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                     0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              HER2; EGFR2; neu; erbB2; c-erb-B-2; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Beigelman L,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           4405 GCAGGAAGTACTAGTTCCC 4423
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     20-FEB-2002; 2002US-0358580P.

11-MAR-2002; 2002US-0363124P.

29-MAY-2002; 2002WS-0363124F.

66-JUN-2002; 2002US-00163552.

66-JUN-2002; 2002US-0386782P.

03-JUN-2002; 2002US-0386782P.

29-AUG-2002; 2002US-0408378P.

05-SEP-2002; 2002US-0408378P.

09-SEP-2002; 2002US-0408378P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       19 GCAGGAACTACTAGTACCC 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ADL79331 standard; RNA; 19 BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              2002US-0409293P
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     20-FEB-2003; 2003WO-US005045
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     2003US-0440129P
                                                                                                                                                                                                                                                                                                                                                                                                  0.3%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           (RIBO-) RIBOZYME PHARM INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        20-MAY-2004 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                              Query Match
Best Local Similarity 89.5'
Matches 17; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Mcswiggen J, Pavco P,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    WPI; 2003-697612/66.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              WO2003070912-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    19-SEP-2002;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         21-OCT-2002;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           15-JAN-2003;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   28-AUG-2003.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ADL79331;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                RESULT 430
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ADL7933
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    $$$$$$$$$$$$$$$$$$$$$$
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       셤
```

```
downregulate expression of one or more human epidermal growth factor receptor (EGRN) genes (including HBR1, HBR2 HBR3 and HBR4) by RNA interference. The sinAs may or may not comprise sense and antisense receptor (EGRN) genes (including HBR1, HBR2 HBR3 and HBR4) by RNA interference. The sinAs may or may not comprise sense and antisense or single stranded. They further comprise sense and antisense or regions, or alternatively are assembled from a sense oligonucleotide and an antisense oligonucleotide. Specifically, the sinAs include short interfering RNA (shRNA), double-stranded RNA, micro-RNA (miRNA) and short hairpin RNA (shRNA). The siNAs can be unmodified or chemically modified, expressed from a vector or enzymatically synthesised. The invention also relates to kits for the in vitro or in vivo delivery of siNA; conjugates and/or complexes of siNA; and vectors that express siNA. The siNAs are used to modulate expression of EGFR genes in cells, tissue explants or organisms (e.g., by ex vivo gene therapy), or in grafts and transplants or corganisms (e.g., by ex vivo gene therapy), or in grafts and transplants or treating a wide range of cancers such as breast and ovarian cancer. The siNAs are also useful for drug screening, diagnosis, therapeutic target identification and validation, genetic engineering, pharmacogenomics, cludying gene function, and gene mapping (e.g., of single mucleotide polymorphisms). The present sequence represents the lower strand of a FBR2 (EGFR2)-targeted double-stranded siNA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Human HER2 (EGFR2) transcript target sequence/sinA upper strand, SEQ:247
                                  New short interfering nucleic acid, useful e.g. for treatment and diagnosis of cancer, downregulates expression of the epidermal growth
                                                                                                                                                                                                                                                         The invention relates to short interfering nucleic acids (siNA) which
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             RNA interference; short interfering nucleic acid; siNh; short interfering RNA; siRNA; double-stranded RNA; micro-RNA; miRNA; short hairpin RNA; shRNA; expression modulation; gene therapy; drug screening; diagnosis; therapeutic target identification; pharmacogenomics; gene function analysis; gene mapping; cancer; cytostatic; human; oncogene; epidermal growth factor receptor; EGFR; HER2; EGFR2; neu; exbB2; c-exb-B-2; target sequence; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     0.3%; Score 15.8; DB 1; Length 19;
4.2%; Pred. No. 3.2e+02;
ve 1; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Sequence 19 BP; 16 A; 2 C; 0 G; 0 T; 1 U; 0 Other;
                                                                                                                                                                                    Example 3; SEQ ID NO 496; 171pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           5024 TAAAAAAAAAAAAA 5042
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1 UAAAAAACAAAACAAAA 19
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                2002US-0363124P.
2002WO-US016840.
2002US-00163552.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ADL79082 standard; RNA; 19 BP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                20-FEB-2003; 2003WO-US005045.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         2002US-0358580P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       2002US-0386782P.
2002US-0393924P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   84.28;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Query Match
Best Local Similarity 84.2
Matches 16; Conservative
                                                                                                               factor receptor gene.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              WO2003070912-A2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       06-JUN-2002;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          20-MAY-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Ното варіепв
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         20-FEB-2002;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               11-MAR-2002;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 06-JUN-2002;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  29-MAY-2002;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       28-AUG-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ADL79082;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               RESULT 431
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ADL/9082/C
XX
AC ADL/9
XX
XX
DT 20-MI
XX
XX
DX 8Humat
XX
KW 8Hort
KW 8Hort
KW 8Hort
KW 6Hort
KW 710-MI
K
ò
```

```
The invention relates to short interfering nucleic acids (siNA) which downregulate expression of one or more human epidermal growth factor computation (including HERA) HERA and HERA) by RNA interference. The siNAs may or may not comprise ribonuclectides and may be double or single stranded. They further comprise sense and antisense cregions, or alternatively are assembled from a sense oligonuclectide and an antisense oligonuclectide. Specifically, the siNAs include short interfering RNA (shRNA), double-stranded RNA, micro-RNA (miRNA) and short interfering RNA (shRNA), The siNAs can be unmodified or chemically modified, can contain deoxyribonuclectides, and can be chemically synthesised. Composessed from a vector or enzymatically synthesised. The invention also expressed from a vector or enzymatically synthesised. The invention also cand/or complexes of siNA; and vectors that express siNA. The siNAs are cused to modulate expression of EGFM genes in cells, tissue explants or organisms (e.g., by ex vivo gene therapy), or in grafts and transplants or creating a wide range of cancers such as breast and ovarian cancer. The siNAs are also useful for drug screening, diagnosis, therapeutic target condimination, and gene mapping (e.g., of single nucleotide collymorphisms). The present sequence represents the upper strand of a human HERZ (EGFRZ)-targeted double-stranded slNA, which is identical to the upper strand of a human HERZ (EGFRZ)-targeted double-stranded slNA, which is identical to
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ô
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          coronary artery disease; CAD; coronary heart disease; CHD; atherosclerosis; hepatic glucose production; glucose—metabolism-related disorder; diabetes; cancer; breast cancer; colon cancer; lung cancer; neurological disease; Huntington disease; spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;
                                                                                                                                                                                                                                                                                New short interfering nucleic acid, useful e.g. for treatment and diagnosis of cancer, downregulates expression of the epidermal growth factor receptor gene.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Gapa
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         cytostatic; anticonvulsant; nootropic; muscula, anti-HIV;
RNA interference; iRNA; antisense technology; lipid metabolism;
cholesterol imbalance; dyslipidaemia hypercholesterolaemia;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Query Match 0.3%; Score 15.8; DB 1; Length 19; Best Local Similarity 89.5%; Pred. No. 3.2e+02; Matches 17; Conservative 0; Mismatches 2; Indels
                                                                                                                                                                                                  Jamison
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Human apolipoprotein B (ApoB) oligonucleotide seqid 2004.
                                                                                                                                                                                                  Fosnaugh K,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Sequence 19 BP; 1 A; 0 C; 2 G; 0 T; 16 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                             Example 3; SEQ ID NO 247; 171pp; English.
                                                                                                                                                                                                  Beigelman L,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   the HER2 transcript target sequence.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 5024 TAAAAAAAAAAAAAA 5042
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        19 TAAAAAAACAAAAA 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       519/c
ADR77519 standard; DNA; 19 BP.
                       2002US-0408378P
  2002US-0406784P
                                                                2002US-00251117
                                                                                       2002US-00277494
                                                                                                          15-JAN-2003; 2003US-0440129P
                                                                                                                                                      (RIBO-) RIBOZYME PHARM INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               16-DEC-2004 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Matches 17; Conservative
                                                                                                                                                                                                    Pavco P,
                                                                                                                                                                                                                                           WPI; 2003-697612/66.
                                                                                                                                                                                                    Mcswiggen J,
                       05-SEP-2002;
                                                                                       21-OCT-2002;
                                                              19-SEP-2002;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ADR77519;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             RESULT 432
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ADR77519
ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        g
```

TGACAGATGAAGATGAAGA 1

13

음

```
continuous and an antisense sequence, where the sense sequences have sense sequence and an antisense sequence, where the sense sequences have one or more asymmetrical phosphorothioate modifications one or more asymmetrical phosphorothioate modifications sequences have one or more asymmetrical phosphorothioate modifications and the antisense sequence targets a human gene sequence. Also described are: a pharmaceutical preparation comprising (I); reducing (MI) apo8-100 care: a pharmaceutical preparation comprising (I); reducing (I); involves selecting a sequence with activity and introducing one or more asymmetrical modification in the sequence, where the modification decreases nuclease sensitivity while not decreasing its cretivity; a kit comprising (I) and instruction for its use; and a device that can be dispense or administer a composition comprising (I). (I) is cretivity, a kit comprising (I) and instruction for its use; and a device that can be dispense or administer a composition comprising (I). (I) is useful for reducing apo8-100 levels or glucose-6-phosphatase levels.

Constructed is unwanted expression of apo8-100, elevated or otherwise unwanted construction and expression of apo8-100, elevated or otherwise unwanted expression of apo8-100, elevated or otherwise unwanted construction and expression of apo8-100, elevated or otherwise unwanted expression of apo8-100, elevated or otherwise unwanted expression of apo8-100, elevated or otherwise unwanted ergonered ergone
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Interference RNA agent useful for treating dyslipidemias, coronary artery disease, diabetes, cancer or neurological disease, comprises sense sequence and antisense sequence which has specific modifications.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               invention describes a RNA interference (iRNA) agent (I) comprising
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Sequence 19 BP; 3 A; 6 C; 1 G; 9 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  can be used to control ApoB gene expression.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Example 5; SEQ ID NO 2004; 378pp; English
                                                                                                                                                                                                                            12-MAR-2003; 2003US-0454265F.
13-MAR-2003; 2003US-0454265F.
14-APR-2003; 2003US-0454650P.
14-APR-2003; 2003US-0465650P.
17-APR-2003; 2003US-046360P.
25-APR-2003; 2003US-046366F.
25-APR-2003; 2003US-046366F.
11-AUG-2003; 2003US-0493966F.
11-AUG-2003; 2003US-0503341P.
26-SEP-2003; 2003US-0503341P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          2003US-0510318P
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            10-OCT-2003; 2003US-0510318P.
07-NOV-2003; 2003US-0518453P.
                                                                                                                                                                08-MAR-2004; 2004WO-US007070
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Bumcrot D;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                (ALNY-) ALNYLAM PHARM.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             WPI; 2004-677362/66.
                                                                      WO2004080406-A2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Manoharan M,
                           Ното варіелв.
                                                                                                                   23-SEP-2004
```

```
and the antisense sequence targets a human gene sequence. Mass described are: a pharmaceutical preparation comprising (1); reducing (M1) apoB-100 levels or glucose-6-phosphatase levels in a subject; producing (I); stabilising (I), involves selecting a sequence with activity and introducing one or more asymmetrical modification in the sequence, where the modification decreases nuclease sensitivity while not decreasing its activity, a kit comprising (I) and instruction for its use; and a device that can be dispense or administer a composition comprising (I). (I) is useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     The invention describes a RNA interference (IRNA) agent (I) comprising a sense sequence and an antisense sequence, where the sense sequences have one or more asymmetrical 2'-O alkyl modifications, the antisense sequences have one or more asymmetrical phosphorothicate modifications.
                                                                                                                                                                 cytostatic; anticonvulsant; noctropic; musculas; anti-HIV, RNA interference; iRNA; antisense technology; lipid metabolism; cholesterol imbalance; dyslipidaemia hypercholesterolaemia; coronary artery disease; CAD; coronary heart disease; CHD; atheroselerosis; hepatic glucose production; glucose-metabolism-related disorder; diabetes; cancer; breast cancer; spinocene; lung cancer; neurological disease; Huntington disease; spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.
                                                                                                                                                  antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Interference RNA agent useful for treating dyslipidemias, coronary disease, diabetes, cancer or neurological disease, comprises sense sequence and antisense sequence which has specific modifications.
                                                                                                                  Human apolipoprotein B (ApoB) oligonucleotide seqid 4960.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Example 5; SEQ ID NO 4960; 378pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     2003US-0454265P.
2003US-0454962P.
2003US-0455050P.
2003US-0462894P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              09-MAY-2003; 2003US-0469612P.
08-AUG-2003; 2003US-0493986P.
11-AUG-2003; 2003US-0494597P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                26-SEP-2003; 2003US-05054IP.
09-0CT-2003; 2003US-0510246P.
10-0CT-2003; 2003US-0510318P.
               BP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             2003US-0463772P.
2003US-0465665P.
2003US-0465802P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         07-NOV-2003; 2003US-0518453P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                 08-MAR-2004; 2004WO-US007070
               ADR80463 standard; DNA; 19
                                                                                       (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Manoharan M, Bumcrot D;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               (ALNY-) ALNYLAM PHARM.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      WPI; 2004-677362/66.
                                                                                                                                                                                                                                                                                                                                                                               WO2004080406-A2.
                                                                                                                                                                                                                                                                                                                                              Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                25-APR-2003;
25-APR-2003;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              14-APR-2003;
17-APR-2003;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               13-MAR-2003;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         07-MAR-2003;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            12-MAR-2003;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            13-MAR-2003;
                                                                                                                                                                                                                                                                                                                                                                                                                   23-SEP-2004.
                                                                                     16-DEC-2004
                                                     ADR80463;
ADR80463/c
                                    ö
```

artery

Gaps . ;

Score 15.8; DB 1; Length 19; Pred. No. 3.2e+02; 0; Mismatches 2; Indels

.

0.3%;

Best Local Similarity 89.5 Matches 17; Conservative

Query Match

gibbs-10-667-022-4.rng

```
is useful for reducing apoB-100 levels or glucose-6-phosphatase levels. The subject is suffering from a disorder characterised by elevated or otherwise unwanted expression of apoB-100, elevated or otherwise unwanted levels of cholasterol, and/or disregulation of lipid metabolism. The disorder is chosen from the HDL/LDL cholesterol imbalance, dyslipidaemias, hypercholesterolasterol imbalance, dyslipidaemias, coronary artery disease (CAD), coronary heart disease (CHD) and atherosclerosis. (I) is administered to a subject to inhibit hepatic glucose production or for treating glucose-metabolism-related disorder e.g. diabetes or type-2 diabetes. (I) is useful for treating the diseases as mentioned above, cancer (e.g. breast, colon or lung cancer), neurological disease (e.g., Huntington disease or virence production or virence (e.g., breast, colon or lung cancer), neurological disease (e.g., AlDS). This sequence represents a human apolipoprotein B (ApoB) antisense oligonucleotide that
                                                                                                                                                                                                                                                                                                                                                                                                                                      ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            This probe, along with AATISIGO, binds to part of a 50-kb region between sequence-tagged sites 54F and 5BS on chromosome-9p21, between amethylthioadenosine-phosphorylasse gene (AATISIG) and an interferon-alpha gene cluster, and may be used to isolate a cyclin-dependent protein-kinase-4-inhibitor (CDK4I) tumour suppressor gene. The CDK4I gene has been isolated as phage lambda clones 10B1-10 (AATISIS) and 10A1 (AATISIS) in Escherichia coli. The gene and its product may be used in diagnosis of cancer, particularly melanoma (especially dysplastic nevus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Probe; human; CDK41; cyclin-dependent kinase-4-inhibitor; tumour suppressor; chromosome-9p21; sequence-tagged site; mutation; methylthioadenosine-phosphorylase; interferon-alpha; 54F; 5BS; deletion; leuksemia; melanoma; diagnostic; dysplastic nevus syndrome; glioma; non-small cell lung carcinoma; cancer; gene therapy; antisense; ribozyme; antibody; imaging; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               for diagnosis, assessing predisposition and treatment of cancers.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Cyclin dependent kinase inhibitor gene, related vectors and antibodies useful for diagnosis, assessing predisposition and treatment of canners
                                                                                                                                                                                                                                                                                                                                                                                                                                      Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                    ô
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Probe for CDK4I gene between sequence-tagged sites 54F and 5BS.
                                                                                                                                                                                                                                                                                                                                                                                    Score 15.8; DB 1; Length 19;
Pred. No. 3.2e+02;
0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                Sequence 19 BP; 3 A; 6 C; 1 G; 9 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                      can be used to control ApoB gene expression.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Example 1; Page 89; 129pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              2903 TGACAGAGGAAGAGAAGA 2921
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TGACAGATGAAGATGAAGA 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               뭠.
                                                                                                                                                                                                                                                                                                                                                                                          0.3%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               95WO-US004655.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        94US-00227800
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AAT15159 standard; DNA; 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              (first entry)
                                                                                                                                                                                                                                                                                                                                                                                    Query Match 0.3
Best Local Similarity 89.5
Matches 17; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                (REGC ) UNIV CALIFORNIA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Carson DA, Nobori T;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 WPI; 1995-373630/48.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           WO9528169-A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               12-APR-1995;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        14-APR-1994;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              29-JUN-1996
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     26-OCT-1995
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Synthetic.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AAT15159;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     13
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   RESULT 434
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AAT15159/
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ઠે
```

```
ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        The cDNA sequences encoding several multiple tumour suppressor (MTS) polypeptides have been isolated and sequenced, using various sequencing and amplification primers such as the primer represented in this sequence. MTS polypeptide-encoding cDNAs and mutante of these are useful for the diagnosis or prognosis of human cancer. Germ-line mutations of MTS cDNAs can be used for diagnosing predisposition to melanoma, leukaemia, astrocytoma, glioblastoma, lymphoma, glioma, Hodgkin's lymphoma, CLL and cancers of the pancreas, thyroid, ovary, uterus, testis, kidney, stomach and rectum. The wild crype gene is useful for gene therapy and MTS polypeptides may also be used for protein replacement therapy. Also the polypeptides or cells contg, an altered MTS gene are
               may also be used in cancer gene therapy, or in antitumour antisense oligonucleotide or ribozyme construction. Antibodies against CDKAI may be
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Wild-type multiple tumour suppressor (MTS) gene and mutant sequences -
useful in diagnosis, prognosis and therapy of human cancer, e.g. melanoma
syndrome), glioma, non-small cell lung carcinoma or leukaemia. The gene
                                                                                                                                               Gapa
                                                                                                                                                                                                                                                                                                                                                                                                                  Multiple tumour suppressor; El-alpha; diagnosis; cancer; leukaemia;
astrocytoma; glioblastoma; Hodgkin's lymphoma; melanoma; glioma;
gene therapy; chronic; ss.
                                                                                                                                               ö
                                                                                                             Score 15.8; DB 1; Length 20;
Pred. No. 3.3e+02;
0; Mismatches 2; Indel8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Score 15.8; DB 1; Length 20; Pred. No. 3.3e+02;
                                                                                                                                                                                                                                                                                                                                                                                              Human MTS1 exon2 PCR amplification/sequencing primer, 42F.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             useful for screening for potential cancer therapeutics
                                                                              Sequence 20 BP; 8 A; 2 C; 7 G; 3 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Sequence 20 BP; 8 A; 2 C; 7 G; 3 T; 0 U; 0 Other;
                                                 used in diagnosis or in vivo imaging
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Example 8; Page 98; 156pp; English.
                                                                                                                                                                               4079 GGTTCCAGTTGCCAATTTC 4097
                                                                                                                                                                                                              20 GCTTCCAGTTTCCAATTTC 2
                                                                                                                                                                                                                                                                                                BP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          94US-00214581.
94US-00214582.
94US-00215088.
                                                                                                              0.3%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              0.3%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              95WO-US003316
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           94US-00227369.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GENETICS INC.
                                                                                                                                                                                                                                                                                              AAQ99171 standard; DNA; 20
                                                                                                                                                                                                                                                                                                                                                                 (first entry)
                                                                                                                                               Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              WPI; 1995-344401/44.
                                                                                                                            Local Similarity
les 17; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              (MYRI-) MYRIAD
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               WO9525429-A1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                or leukaemia.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             17-MAR-1995;
                                                                                                                                                                                                                                                                                                                                                               07-MAY-1996
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             18-MAR-1994;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             18-MAR-1994;
18-MAR-1994;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             14-APR-1994;
01-JUN-1994;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              28-SEP-1995
                                                                                                                                                                                                                                                                                                                               AAQ99171;
                                                                                                             Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Kamb A;
                                                                                                                                                                                                                                                               RESULT 435
                                                                                                                                               Matches
                                                                                                                                                                                                                                                                                AAQ99171,
 S X S S S S S
                                                                                                                                                                                 ઠ
                                                                                                                                                                                                            셤
```

```
Nucleic acids based on multiple tumour suppressor, MTS, sequences - useful as hybridisation probes, primers and recombinant production of MTS in the diagnosis and treatment of cancers related to MTS mutation(s).
Multiple tumour suppressor; MTS; human; cancer; hybridisation; somatic mutation; gene therapy; 88.
                                                                                                                                                                                                                                                               Disclosure; Col 69-70; 73pp; English.
                                                                                                     94US-00214582.
94US-00215086.
94US-00215087.
94US-00227369.
94US-00251938.
95WO-US003316.
                                                                                     95US-00480810.
                                                                                                                                                                     (MYRI-) MYRIAD GENETICS INC.
                                                                                                                                                                                                         WPI; 1998-494842/42.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 unidentified
                                                                                                                         18-MAR-1994;
14-APR-1994;
01-JUN-1994;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     US5739027-A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          17-OCT-2003
15-JUL-1998
                                                                                      07-JUN-1995;
                                                                                                        18-MAR-1994;
                                                                                                                  L8-MAR-1994;
                                                                                                                                                     17-MAR-1995;
                                                 US5801236-A.
                                                                    01-SEP-1998
                                                                                                                                                                                                                                                                                                                                                                                           in a cell
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AAV11244;
                                 Synthetic.
                                                                                                                                                                                          Ä
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      438
                                                                                                                                                                                          Kamb
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      RESULT
     g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                    The present sequence is primer for the PCR amplification of exon 2 of the human multiple tumour suppressor gene 1 (MTS1), useful in cancer diagnosis. (Updated on 25-MAR-2003 to correct PF field.)
       ö
                                                                                                                                                                                                                                                                                                                                                                                                          Human mutant multiple tumour suppressor gene sequences - for production of recombinant mutant polypeptide(s).
                                                                                                                                                                         Primer; polymerase chain reaction; PCR; amplification; exon 2; human; multiple; tumour; suppressor; MTS1; cancer; diagnosis; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Gaps
       Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ö
        ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            0.3%; Score 15.8; DB 1; Length 20;
89.5%; Pred. No. 3.3e+02;
ative 0; Mismatches 2; Indels
                                                                                                                                                       Human multiple tumour suppressor gene 1 exon 2 primer 42F.
        Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Sequence 20 BP; 8 A; 2 C; 7 G; 3 T; 0 U; 0 Other;
        2;
        0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                        Skolnick MH;
                                                                                                                                                                                                                                                                                                                                                                                                                                       Example 8; Col 69-70; 72pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    4079 GGTTCCAGTTGCCAATTTC 4097
                            4079 GGTTCCAGTTGCCAATTTC 4097
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ~
                                                                                                                                                                                                                                                                              94US-00214582.
94US-00215086.
94US-00215087.
94US-00227369.
94US-00251938.
                                                                                            E.
                                                                                                                                                                                                                                                                                                                                                                          Kamb A,
                                           20 GCTTCCAGTTTCCAATTTC
                                                                                                                                                                                                                                                              95US-00474177
                                                                                                                                                                                                                                                                                                                             95WO-US003537
                                                                                                                                                                                                                                                                                                                                              (MYRI-) MYRIAD GENETICS INC.
(UTAH ) UNIV UTAH RES FOUND.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AAV53825 standard; DNA; 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      04-DEC-1998 (first entry)
                                                                                           AAT69775 standard; DNA; 20
                                                                                                                                (revised)
(first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Best Local Similarity 89.5
Matches 17, Conservative
          17; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Nucleotide sequence 3.
                                                                                                                                                                                                                                                                                                                                                                                           WPI; 1997-258217/23.
                                                                                                                                                                                                                                                                                                                                                                          Cannon-Albright LA,
                                                                                                                                                                                                                                                             07-JUN-1995;
                                                                                                                                                                                                                                                                                18-MAR-1994;
18-MAR-1994;
                                                                                                                                                                                                                                                                                                         14-APR-1994;
01-JUN-1994;
                                                                                                                                                                                                                                                                                                  18-MAR-1994
                                                                                                                                                                                                                                                                                                                             17-MAR-1995
                                                                                                                                25-MAR-2003
10-SEP-1997
                                                                                                                                                                                                                           US5624819-A
                                                                                                                                                                                                                                           29-APR-1997
                                                                                                                                                                                                        Synthetic.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AAV53825;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Query Match
                                                                                                              AAT69775
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   RESULT 437
                                                                           436
           Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AAV53825/
                                                                                             q
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       8
                              ઠે
                                               g
```

```
ö
This is the nucleotide sequence of a nucleic acid used in the method of the invention involving the used of the multiple tumour suppressor (MTS) gene, to diagnose and treat cancer. The MTS gene is useful in the diagnosis and prognosis of human cancer, e.g. by standard nucleic hybridisation techniques, of patient samples. The mutated sequences are those that are present in somatic mutations of the gene in cancers. The weeters can be used for gene therapy strategies to replace function of mutated protein in patients. These can also be used to construct protein mimetics, also for therapeutic strategies. In addition the expression constructs can also be used for recombinant production of MTS.

Recombinant MTS can be used for recombinant production of MTS.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           MTS1; multiple tumour suppressor; diagnosis; cancer; germ-line mutation;
familial melanoma locus; MLM; predisposition; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Length 20;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Sequence 20 BP; 8 A; 2 C; 7 G; 3 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    0.3%; Score 15.8; DB 1;
89.5%; Pred. No. 3.3e+02;
tive 0; Mismatches 2;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              4079 GGTTCCAGTTGCCAATTTC 4097
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    20 GCTTCCAGTTTCCAATTTC 2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AAV11244 standard; DNA; 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 (revised)
(first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Query Match 0.3
Best Local Similarity 89.5
Matches 17; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Seq ID#8 from US5739027.
```

ô

```
PCR primers AAV70587-93 were used to screen exons in human multiple tumour suppressor 1 (MTS1) gene for germline mutations. The MTS1 sequence is homologous to the corresponding murine gene. Primers designed from the gene can be used to design primars to detect abnormalities i.e. polymorphisms which may predispose towards malignancies such as melanoma, leukaemia, astrocytoma, lymphoma, glioma, as well as tumours of e.g. the breast, thyroid, pancreas, lucrus and kidneys. (Updated on 20-MAR-2003 to correct PF field.)
                                Mouse multiple tumour suppressor gene segment – useful for primer design.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         The invention relates to the isolation of the gene encoding the human multiple tumour suppressor 1 (MTS1) (AAA95633). The MTS1 protein has a cytostatic activity and is used in protein replacement therapy. This sequence is a PCK primer used in the amplification and detection of mutations in the MTS1 gene. MTS1 is useful in diagnosing human cancers such as (ocular) melanoma, leukemia, astrocytoma, glioblastoma, lymphoma,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Novel protein composition useful in protein replacement therapy for diagnosing and treating cancer comprises a specific weight percent of human multiple tumor suppressor 1 polypeptide.
                                                                                                                                                                                                                                                                                     Gapa
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Cytostatic; human; multiple tumour suppressor 1; MTS1; diagnostic; cancer; gene therapy; protein replacement therapy; PCR primer; ss.
                                                                                                                                                                                                                                                                                     ö
                                                                                                                                                                                                                                                     0.3%; Score 15.8; DB 1; Length 20;
89.5%; Pred. No. 3.3e+02;
tive 0; Mismatches 2; Indels
                                                                                                                                                                                                                           Sequence 20 BP; 8 A; 2 C; 7 G; 3 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Human MTS1 gene mutant detection primer 42P.
                                                            Example 9; Col 73-74; 80pp; English
                                                                                                                                                                                                                                                                                                                 4079 GGTTCCAGTTGCCAATTTC 4097
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Example 8; Col 71; 72pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     94US-00214582.
94US-00215086.
94US-00215087.
94US-00227369.
                                                                                                                                                                                                                                                                                                                                             GCTTCCAGTTTCCAATTTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            97US-00986515
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 95WO-US003316
95US-00480810
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            (MYRI-) MYRIAD GENETICS INC
                                                                                                                                                                                                                                                                                                                                                                                                           .641/c
AAA95641 standard; DNA; 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                14-FEB-2001 (first entry)
                                                                                                                                                                                                                                                     Query Match 0.3
Best Local Similarity 89.5
Matches 17; Conservative
   WPI; 1999-044585/04.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     WPI; 2000-514036/46.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            08-DEC-1997;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     18-MAR-1994;
14-APR-1994;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         18-MAR-1994;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   US6090578-A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               18-JUL-2000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    01-JUN-1994
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  07-JUN-1995
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 17-MAR-1995
                                                                                                                                                                                                                                                                                                                                                                                                                                                    AAA95641;
                                                                                                                                                                                                                                                                                                                                              20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Kamb A;
                                                                                                                                                                                                                                                                                                                                                                                           RESULT 440
                                                                                                                                                                                                                                                                                                                                                                                                         AAA95641,
   셤
                                                                                                                                                                                                                                                                                                                                                                                                                                     ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ö
                                                                                                                                                                                                                                                                                                                                          This invention describes three human multiple tumour suppression proteins. The MTS gene locus is also referred to as the familial melanoma (MLM) gene locus, located on human chromosome 9p21. Germ line mutations in MTS genes can be used in the diagnosis of predisposition to cancers, e.g. melanoma, leukaemia, astrocytoma, gliboblastoma, lymphoma, glioma, Hodgkin's lymphoma, CiL, and cancers of the pancreas, breast, thyroid, ovary, uterus, testis, kidney, stomach and rectum. NOTE: This sequence is not mentioned in the specification but is given in the sequence ID listing. (Updated on 17-OCT-2003 to standardise OS field)
                                                                                                                                                                                                                                                     specific for Multiple Tumour Suppressor 1E1-beta gene - are useful the diagnosis of cancers related to MTS1E1-beta mutation(s) and their
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Human; multiple tumour suppressor 1 gene; MTS1; cancer; PCR primer; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              PCR primer 42F used to screen exon 2 of human genomic MTS1 gene.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        0.3%; Score 15.8; DB 1; Length 20; 89.5%; Pred. No. 3.3e+02; Live 0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Sequence 20 BP; 8 A; 2 C; 7 G; 3 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                               Disclosure; Col 69-70; 72pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    GGTTCCAGTTGCCAATTTC 4097
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ścirccagirrccaarric 2
                                                                      94US-00215086.
94US-00215087.
94US-00227369.
94US-00251938.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ВР.
                                95US-00487033
                                                                                                                                    95WO-US003316
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               95US-00508735
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         95WO-US003316
95US-00487033
                                                            94US-00214582
                                                                                                                                                              GENETICS INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    (MYRI-) MYRIAD GENETICS INC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Jiang P, Kamb A, Stone S;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AAV70589 standard; DNA; 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   (revised)
(first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Conservative
                                                                                                                                                                                                                         WPI; 1998-250421/22.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Local Similarity
ses 17; Conserv
                                                                                                                                                              (MYRI-) MYRIAD
                             07-JUN-1995;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             28-JUL-1995;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           17-MAR-1995;
                                                                        18-MAR-1994;
18-MAR-1994;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         17-JUN-1995;
                                                                                                     14-APR-1994;
01-JUN-1994;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                20-MAR-2003
03-FEB-1999
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   US5843756-A.
14-APR-1998
                                                                                                                                    17-MAR-1995
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  01-DEC-1998
                                                                                                                                                                                                                                                                                  treatment
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Synthetic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    4079
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AAV70589;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Query Match
                                                                                                                                                                                             Kamb A;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Best Loca
Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             RESULT 439
                                                                                                                                                                                                                                                      DNA
 윱
```

ઠે

8888888

ò 셤

```
à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             원
88888
                                                                                                                             à
                                                                                                                                                    g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                This sequence is a PCR primer for DNA encoding the human MTS1 protein. The invention relates to a method for diagnosing a polymorphism associated with a predisposition to cancer by detecting a germ-line alteration of a wild-type Multiple Tumour Suppressor (MTS) gene or its expression products in a human sample. The method comprises detecting a germ-line alteration of a wild-type MTS gene or its expression products in a human sample. The alteration indicating a predisposition to at least one of the cancers. The cancer is selected from melanoma, leukaemia, astrocytoma, glioblastoma, lymphoma, glioma, Hodgkin's lymphoma, chronic lymphocytic leukaemia, lymphoma, glioma, Hodgkin's lymphoma, chronic thyroid, ovary, uterus, testis, kidney, stomach and rectum. The method may be used as the basis for developing very important diagnostic tests capable of predicting the predisposition to cancer. The MTS gene is
                                                                                                                                            ..
                                                                                                                                                                                                                                                                                                                                                               MTS; human; polymorphism detection; cancer predisposition; astrocytoma; Multiple Tumour Suppressor gene; melanoma; leukaemia; glioblastoma; lymphoma; glioma; Hodgkin's lymphoma; chronic lymphocytic leukaemia; therapy; MTS1; PCR primer; ss.
glioma, Hodgkin's lymphoma, multiple myeloma, sarcoma, myosarcoma, cholangiocarcinoma, squamous cell carcinoma, CLL, and cancers of pancreas, breast, stomach, brain, prostate, bladder, thyroid, ovary, uterus, testis, kidney, colon and rectum. The MTSI gene and protein is useful in gene therapy, protein replacement therapy and protein mimetic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Diagnosing a polymorphism associated with a predisposition for cancer.
                                                                                                                                             Gaps
                                                                                                                                            ö
                                                                                                                 Score 15.8; DB 1; Length 20;
Pred. No. 3.3e+02;
0; Mismatches 2; Indels
                                                                                         Sequence 20 BP; 8 A; 2 C; 7 G; 3 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Kamb A;
                                                                                                                                                                                                                                                                                                                                           PCR primer for human MTS1 coding sequence.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Example 8; Col 71-72; 74pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Cannon-Albright LA,
                                                                                                                                                                       4079 GGTTCCAGTTGCCAATTTC 4097
                                                                                                                                                                                      20 GCTTCCAGTTTCCAATTTC 2
                                                                                                                                                                                                                                                                AAZ48780 standard; cDNA; 20 BP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       94US-00214582.
94US-00215086.
94US-00215087.
94US-00227369.
94US-00251938.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     95US-00474083
                                                                                                                     0.3%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                97US-00848251
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             UNIV UTAH RES FOUND
MYRIAD GENETICS INC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            UTAH RES FOUND
                                                                                                                                                                                                                                                                                                                    (first entry)
                                                                                                                                               Matches 17; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            WPI; 2000-070785/06.
                                                                                                                      Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        01-JUN-1994;
17-MAR-1995;
07-JUN-1995;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Skolnick MH,
                                                                                                                                                                                                                                                                                                                                                                                                                                       Homo sapiens,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 29-APR-1997;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          18-MAR-1994;
                                                                                                                                                                                                                                                                                                                  21-MAR-2000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    18-MAR-1994;
                                                                                                                                                                                                                                                                                                                                                                                                                                                               US5989815-A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         23-NOV-1999
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                14-APR-1994
                                                                                                                                                                                                                                                                                           AAZ48780;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             (UTAH )
(MYRI-)
                                                                      studies
                                                                                                                                                                                                                                          RESULT 441
                                                                                                                                                                                                                                                        AAZ48780/
```

```
ò
                                                                                                                                                                          ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    This sequence represents a PCR primer for the human multiple tumour suppressor 2 (MTS2) coding sequence of the invention. The DNA sequences are useful for diagnosing or determining a predisposition to cancers e.g. melanoma, leukaemia, lymphoma, glioma, Hodgkin's lymphoma and cancers of the pancreas, breast, thyroid, ovary, kidney, uterus and stomach
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Multiple tumour suppressor; MTG2; human; diagnosis; Hodgkin's lymphoma; cancer predisposition; melanoma; leukaemia; lymphoma; glioma; PCR primer;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Multiple tumor suppressor cDNA, useful for diagnosing or determining a predisposition to cancer.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Gaps
                                                                                                                                                                          Gaps
involved in the progression of multiple tumour types and may provide means for a general anti-cancer therapy by virtue of its ability to
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 PCR primer for human multiple tumour suppressor 2 coding sequence.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ;
0
                                                                                                                                                                          ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Length 20;
                                                                                                                               0.3%; Score 15.8; DB 1; Length 20; 89.5%; Pred. No. 3.3e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           2; Indels
                                                                                                                                                                          Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Sequence 20 BP; 8 A; 2 C; 7 G; 3 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Match 0.3%; Score 15.8; DB 1; Local Similarity 89.5%; Pred. No. 3.3e+02; les 17; Conservative 0; Mismatches 2;
                                                                                    Sequence 20 BP; 8 A; 2 C; 7 G; 3 T; 0 U; 0 Other;
                                                                                                                                                                          0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Example 8; Col 69-70; 72pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       4079 GGTTCCAGTTGCCAATTTC 4097
                                                                                                                                                                                                                       4079 GGTTCCAGTTGCCAATTTC 4097
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               20 GCTTCCAGTTTCCAATTTC 2
                                                                                                                                                                                                                                                   94US-00214582.
94US-00215086.
94US-00215087.
94US-00227369.
94US-00251938.
                                                                                                                                                                                                                                                                                                                                                                               ВЪ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           95US-00486047
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              95WO-US003316
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       (MYRI-) MYRIAD GENETICS INC.
                                                                                                                                                                                                                                                                                                                                                                               AAZ39985 standard; DNA; 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 11-FEB-2000 (first entry)
                                                                                                                   Query Match
Best Local Similarity 89.5.
These 17; Conservative
                                                 suppress tumour growth
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         WPI; 2000-038259/03.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      18-MAR-1994;
18-MAR-1994;
14-APR-1994;
01-JUN-1994;
17-MAR-1995;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               07-JUN-1995;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           US5994095-A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        18-MAR-1994;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    30-NOV-1999
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Synthetic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                           AAZ39985;
                                                                                                                                                                                                                                                                     20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Kamb A;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Matches
                                                                                                                                                                                                                                                                                                                                                             AAZ39985,
```

```
Variant; human; multiple tumour suppressor; MTS; mutation; melanoma; cancer; diagnosis; PCR primer; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        New mutants of the human multiple tumor suppressor gene, useful diagnostic markers of cancer, contain specific base alterations deletions.
                                                                                                                                Human MTS1 gene exon screening primer 42F,
                                             AAA11171 standard; DNA; 20 BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 WPI; 2000-269915/23
                                                                                                                                                                                                                                                                                                                                                                                                                                          (MYRI-) MYRIAD
                                                                                                                                                                                                       Homo sapiens
                                                                                                   11-OCT-2000
                                                                                                                                                                                                                                                                                            22-JUL-1998;
                                                                                                                                                                                                                                                                                                                                                                                                              17-JUN-1995;
                                                                                                                                                                                                                                    US6037462-A.
                                                                                                                                                                                                                                                                                                                        18-MAR-1994;
                                                                                                                                                                                                                                                               14-MAR-2000
                                                                                                                                                                                                                                                                                                                                      18-MAR-1994
                                                                                                                                                                                                                                                                                                                                                     18-MAR-1994
                                                                                                                                                                                                                                                                                                                                                                 14-APR-1994
                                                                                                                                                                                                                                                                                                                                                                                  01-JUN-1994
                                                                                                                                                                                                                                                                                                                                                                                              17-MAR-1995
                                                                        AAA11171;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Kamb A;
                                                          8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     The present invention describes a vector (17) Compared and a maintained a vector (17) described a multiple tumour suppressor (17) is useful for polynucleotide sequence of the human MTSIE1-beta. (1) is useful for introducing wild-type MTS function to a cancerous or pre-cancerous cell introducing wild-type MTS function to a cancerous or pre-cancerous cell which carries diminished or mutant MTSIE1-beta. (1) is useful for increasing the carries for increasing the mutant growth of the recipient cells. (1) is also useful for increasing the mutant gene is expressed at a normal lavel but (1) is useful as a model system to study cancer remission and drug treatment which promotes such to study cancer remission and drug treatment which promotes such to study cancer remission and drug treatment which promotes such the present invention relates to sometic mutations and germ in mutations in the MTS gene and their use in the diagnosis and prognosis of human cancer e.g. melanoma, leukaemia, astrocytoma, glioblastoma, lymphoma, glioblastoma, and cancers of the pancreas, breast, thyroid, ovary, uterus, testis, kidney, stomach and rectum. The present sequence represents an oligonucleotide given in the sequence listing from the present invention, but which does not appear to
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         New vector useful for gene therapy of cancer associated with mutation in tumor suppressor gene, comprises DNA sequence of multiple tumor
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              The present invention describes a vector (I) comprising an isolated DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Gaps
                                                                                                                                            Human; multiple tumour suppressor; MTS; somatic mutation; cancer; diagnosis; germ line mutation; gene therapy; cytostatic; melanoma; leukaemia; astrocytoma; glioblastoma; lymphoma; glioma; Hodgkin's lymphoma; se:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Query Match 0.3%; Score 15.8; DB 1; Length 20; Best Local Similarity 89.5%; Pred. No. 3.3e+02; Matches 17; Conservative 0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Seguence 20 BP; 8 A; 2 C; 7 G; 3 T; 0 U; 0 Other;
                                                                                                                 Human MTS related oligonucleotide SEQ ID NO:8.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 mentioned further within the specification
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Disclosure, Col 71; 71pp; English.
                            AAA39359 standard; DNA; 20 BP.
                                                                                                                                                                                                                                                                                                                                   94US-00214582.
94US-00215086.
94US-00227369.
94US-00251938.
95WO-US003316.
95US-00486810.
                                                                                                                                                                                                                                                                                                         98US-00115252
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      GENETICS INC.
                                                                                    (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              WPI; 2000-349676/30.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         suppressor gene.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     (MYRI-) MYRIAD
                                                                                                                                                                                                                                                                                                         14-JUL-1998;
                                                                                    12-SEP-2000
                                                                                                                                                                                                                                                 US6060301-A.
                                                                                                                                                                                                                                                                            09-MAY-2000
                                                                                                                                                                                                                                                                                                                                      18-MAR-1994
                                                                                                                                                                                                                                                                                                                                                                 18-MAR-1994;
14-APR-1994;
                                                                                                                                                                                                                                                                                                                                                                                                          17-MAR-1995
07-JUN-1995
                                                                                                                                                                                                                                                                                                                                                                                              01-JUN-1994
                                                                                                                                                                                                                                                                                                                                                                                                                                        08-DEC-1997
                                                         AAA39359;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Kamb A;
   443
RESULT 44:
AAA39359/c
                                                                                                                                                                                                                      Komo
```

94US-00214582. 94US-00215086. 94US-00215087. 94US-00227369.

95WO-US003316 95US-00480810 GENETICS INC.

98US-00120130

(first entry)

aB

```
The invention relates to variants (AAA11196-A11206) of the human multiple tumour suppressor 1 (MTS1) gene (AAA11165). The variants have the following changes relative to the wild type coding sequence: A at any of positions 265, 442, 330 and 329; T at any of positions 172, 238, 341 and 148 and deletions of nucleotides 290-294, 172-179 or 128-129. The variants are somatic mutaations of MST1, indicative of predisposition to melanoma and many other cancers, so detecting them is useful for diagnosis, prognosis and monitoring of cancer (including prenatal analysis). Cells and animals that express the variants are useful as model systems for identifying potential anticancer agents. This sequence represents a primer used to screen for mutations in exon 2 of the MTS 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Gарв
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  / Match 0.3%; Score 15.8; DB 1; Length 20; Local Similarity 89.5%; Pred. No. 3.3e+02; Nonservative 0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Sequence 20 BP; 8 A; 2 C; 7 G; 3 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      4079 GGTTCCAGTTGCCAATTTC 4097
Example 8; Col 69; 72pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  20 GCTTCCAGTTTCCAATTTC 2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                BP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AAZ55597 standard; DNA; 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          14-MAR-2000 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AAZ55597;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           RESULT 445
                                                                                                                                                                                                                                                                                                                                                                                                                  gene
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AAZ55597
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                #XXXX
```

ö

ö

4079 GGTTCCAGTTGCCAATTTC 4097

ઠે 셤

20 GCTTCCAGTTTCCAATTTC 2

88.

```
The invention relates to canine interleukin-4 (IL-4), canine or feline CC FIL-3 ligand, canine or feline CD40, canine or feline CD54 (CD40 ilgand), canine IL-5, canine IL-13, feline interferon-alpha (IFN-alpha) and feline granulocyte macrophage colony-stimulating factor (CMCSF), and conflowed and conflowed and inhibitors may be used as vaccines for therapeutic or prophylactic regulation of an immune conflowed as vaccines for therapeutic or prophylactic regulation of an immune response in animals (particularly acts, dogs, horses and humans). They may be used to treat autoimmune or infectious diseases including conflowed in the conflowed in isolation, amplification and cloning to conflowed in the conflowed in conflowed in the conflowed in the conflowed in the conflowed in conflowed in the conflowed in the conflowed in conflowed in the conflowed in the conflowed in conflowed in conflowed in the conflowed in c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Nucleic acid sequencing; single-stranded nucleic acid binding protein;
                                                                          Interleukin; IL-4; IL-5; IL-13; Flt-3 ligand; CD40; CD40 ligand; CD154; interferon-alpha; IFN-alpha; GMCSF; antibody; canine; feline; granulocyte macrophage colony-stimulating factor; inhibitor; immune response; immunoregulation; tumour; cancer; autoimmune disease;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Nucleic acids encoding immunoregulatory proteins from cats or dogs, useful for treating or preventing e.g. tumors or autoimmune disease
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Query Match

0.3%; Score 15.8; DB 1; Length 20;
Best Local Similarity 89.5%; Pred. No. 3.3e+02;
Matches 17; Conservative 0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Oligonucleotide #8 produced by a novel sequencing method.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Sequence 20 BP; 2 A; 4 C; 7 G; 7 T; 0 U; 0 Other;
Canine IL-13 sense PCR primer, SEQ ID NO:143.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Wonderling RS;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Example 6A; Page 108; 264pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               3920 ATGGCTCTCTGGTTGGCTG 3938
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1 ATGGCGCTCTGGTTGACTG 19
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  99WO-US011942
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  98US-0087306P
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Yang S, Dreitz MJ,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AAA90517 standard; DNA; 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            15-DEC-2000 (first entry)
                                                                                                                                                                                                                                                                              vaccine; PCR; primer; ss
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   WPI; 2000-072623/06.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               (HESK-) HESKA CORP.
                                                                                                                                                                                                                                                                                                                                                                                                             Canis familiaris.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           29-MAY-1998;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  28-MAY-1999;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     WO9961618-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              02-DEC-1999
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AAA90517;
                                                                                                                                                                                                                                                                                                                                                                       Synthetic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Sim G,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    RESULT 446
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AAAA90517/
ID AAAS
XX
AC AAAS
XX
XX
DT 15-I
XX
XX
XX
XX
XX
XX
XX
XX
```

ð 셤

```
The present invention relates to a method for identifying a target base in a nucleic acid ("template"). A primer is used in the present method, which hybridises to the template adjacent to the target position. A polymerase reaction is then carried out on the primer and template in the presence of a nucleotide, which is incorporated and detected only when the nucleotide is complementary to the base in the target position. A single-stranded nucleic acid binding protein (SSB) is included in the polymerase reaction step. The present sequence is an oligonucleotide product, produced by the present method. This sequence was used to exemplify the advantages of the new method of the present invention. The method is useful for sequencing nucleic acids such as DNA and RNA and for identifying single nucleotide mutations which are characteristic of many
                                                                                                                                                                                                                                                                                                          Identifying a target base in a nucleic acid comprising polymerase reaction of a target sequence with a primer where a single single-grranded nucleic acid binding protein is included in the reaction, useful
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Human antibody; detection; Fab; immunoglobulin; heterophilic antibody; human anti-mouse antibody; HAMA antibody; interleukin 8; IL-8; Herpes; target antigen; bacterial; fungal; viral; pathogen; human disease; hepatitis A; hepatitis B; hepatitis C; influenza; Giardia; Malaria; Leishmania; Staphylococcus aureus; Pseudomonas aeruginosa; diagnosis;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               0.3%; Score 15.8; DB 1; Length 20; 89.5%; Pred. No. 3.38+02; rative 0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sequence 20 BP; 5 A; 5 C; 5 G; 5 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Hco7 mice cDNA heavy chain PCR primer #952.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       4770 GACTGACTGACTAAATGAC 4788
SSB; single nucleotide mutation;
                                                                                                                                                                                                                                                                                                                                                                                                   Example 4; Fig 5; 37pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     20 GACTGACTGACTGAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         BP
                                                                                                                                                                                                                                                                                                                                                                   for sequencing nucleic acids.
                                                                                                                                   20-JAN-2000; 2000WO-GB000146
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AAH41615 standard; DNA; 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        28-AUG-2001 (first entry)
                                                                                                                                                                                                    (PYRO-) PYROSEQUENCING AB.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          diseases e.g. cancer
                                                                                                                                                                                                                                                                                   WPI; 2000-476200/41.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Local Similarity
                                                                                                                                                                                                                     GARDNER R.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            WO200140306-A1
                                    Unidentified
                                                                                                                                                                      22-JAN-1999;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               PCR primer;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         17;
                                                                                                     27-JUL-2000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Mus sp.
Synthetic.
                                                                                                                                                                                                                                                       Ronaghi M;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AAH41615;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Query Match
                                                                                                                                                                                                                       (GARD/)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             RESULT 447
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AAH41615,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        g
```

```
03-APR-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AAS02570;
                                                                                                                                                                                                                                                                                                                                                                 Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Stone S,
                                                                                                                                  Kamb A;
                                                                                                                                                                                                                                                                                                                                                                                           Matchee
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                              g
                                                                                                                                                                                                                                                 human sample containing human antibodies that specifically bind to
antibodies from a nonhuman species. The method involves contacting the
sample with a human antibody (1) which specifically binds to antibodies
cantibodies from a nonhuman species. The method involves contacting the
sample with a human antibody (1) which specifically binds to antibodies
c from a nonhuman species and detecting the binding between (1) and the
canalyte to indicate presence of the analyte. The method is used for
detecting an analyte in a human sample containing human anti-mouse
c antibody (HAWA) (preferably human anti-mouse idiotype antibodies and/or
heterophilic antibodies). The method can also be used for detecting any
type of target antigen including bacterial, fungal and viral pathogens
c that cause human diseases e.g., hepatitis (A,B and C), influenza, Herpes,
c diardia, Malaria, Leishmania, Staphylococcus aureus, Pseudomonas
c that cause human antibodies can be used as detection reagents for
performing clinical diagnostic tests and for performing other in virro
detection assays, including for research purposes. (1) can be used in
c detection assays, including for research purposes. (2) can be used in
c target antigens above minimally detectable amounts of antigen in the
c sample that usually correspond to the sensitivity limitations of the
assays for each target antigen. Also, (1) is used to determine the amount
c f target antigen in a semi-quantitative or relative sense.
C target antigen in a semi-quantitative can also be
c carried out using (1). AAH41612 to AAH41686, and AAB99361 to AAB99399,
crepresent sequences used in the exemplification of the present invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ö
                                                                                                                                                                        Detecting analyte in human sample containing human antibodies binding to
nonhuman-antibodies, involves contacting sample with human antibody which
binds to antibodies from nonhuman species and detecting binding.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Human; multiple tumour suppressor; MTS; cancer; gene therapy; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            0.3%; Score 15.8; DB 1; Length 20; 89.5%; Pred. No. 3.3e+02; ative 0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Sequence 20 BP; 2 A; 4 C; 10 G; 4 T; 0 U; 0 Other;
                                                                                                                     Lonberg N;
                                                                                                                                                                                                                              Example 3; Page 52; 135pp; English.
                                                                                                                     Gray J,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 366 CCTCCACCAACAGCCCATC 384
                                                                             (BIOS-) BIOSITE DIAGNOSTICS INC (GENP-) GENPHARM INT.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    19 CCTCCACCAAGGGCCCATC 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AAF58177 standard; DNA; 20 BP
                          06-DEC-2000; 2000WO-US033042.
                                                     99US-00456090.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 98US-00120129.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Local Similarity 89.5
108 17; Conservative
                                                                                                                     Valkirs G,
                                                                                                                                                WPI; 2001-374798/39
                                                     06-DEC-1999;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                22-JUL-1998;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            US6180776-B1
                                                                                                                     Buechler J,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   23-APR-2001
07-JUN-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       30-JAN-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Primer #7
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AAF58177;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      448
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AAF58177/
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         8
```

```
ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        The present invention relates to human multiple tumor suppressor-2 (MTS2) gene. The invention is useful for diagnosing, prognosing and treating cancers. It is also useful for screening drugs for cancer therapy and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                New mouse multiple tumor suppressor gene, useful for diagnosing or prognosing human cancer or as gene therapy for treating cancer, particularly melanoma, leukemia, astrocytoma, lymphoma or cancers of the
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Human; multiple tumour suppressor; MTS1; MTS2; therapeutic; diagnostic; cancer; gene therapy; melanoma; leukaemia; astrocytoma; glioblastoma; lymphoma; glioma; Hodgkin's lymphoma; chronic lymphatic leukaemia; PCR primer; ss.
                                                                                                                                                                                                                                                                                                                                   Novel multiple tumor suppressor gene useful for diagnosing, prognosing and treating cancers, such as melanoma, leukemia, glioblastoma and Hodgkin's lymphoma.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Gapa
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    PCR primer #3 used in analysis of multiple tumour suppressor MTS1/2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           0.3%; Score 15.8; DB 1; Length 20;
89.5%; Pred. No. 3.3e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Sequence 20 BP; 8 A; 2 C; 7 G; 3 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           0, Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   4079 GGTTCCAGTTGCCAATTTC 4097
                                                                                                                                                                                                                                                                                                                                                                                                                                           Example 8; Col 69; 71pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              GCTTCCAGTTTCCAATTTC 2
94US-00214582.
94US-00215086.
94US-00215087.
94US-00251938.
95WS-00486047.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 BP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            98US-00201139,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               95US-00508735.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          95US-00487033
                                                                                                                                                                                     GENETICS INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  (MYRI-) MYRIAD GENETICS INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Kamb A;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AAS02570 standard; DNA; 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    29-AUG-2001 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Local Similarity 89.5
nes 17; Conservative
                                                                                                                                                                                                                                                                                     WPI; 2001-158668/16.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     WPI; 2001-280859/29
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Jiang P,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  pancreas or breast.
                                                                                                                                                                                  (MYRI-) MYRIAD
                                                                          01-JUN-1994;
17-MAR-1995;
07-JUN-1995;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            30-NOV-1998;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           gene therapy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       US6210949-B1
                             18-MAR-1994;
                                                        18-MAR-1994;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               17-MAR-1995;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          07-JUN-1995;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  28-JUL-1995;
```

```
ö
                                                    The sequence represents PCR primer #3 used in analysis of multiple tumour suppressor MTS1 and MTS2. The MTS genes, and expression products, are useful for treating, diagnosing of prognosing human cancer. In particular, the MTS gene is useful for diagnosing a predisposition to or as a gene therapy for melanoma, leukaemia, astrocytoma, gliobastoma, lymphoma, chronic lymphatic leukaemia (CLL), or cancers of the pancreas, breast, thyroid, ovary, uterus, testis, kidney, stomach or rectum. The gene may be used in both cancerous and pre
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          The present invention describes a method (M1) for producing a human antibody phage display library (1), comprising: (1) providing a nonhuman transgenic animal (II) whose genome comprises human immunoglobulin genes; (2) isolating nucleic acids encoding human antibody chains (III) from lymphatic cells; and (3) forming a library of display packages whose members comprise a nucleic acid encoding (III) which is displayed from the package. The method is used for producing a human antibody display library, e.g., a Fab phage display library. The display method may be used to screen nucleic acids encoding antibody chains obtained from immunised nonhuman transgenic animals, and from this a population of
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Producing a human antibody phage display library comprises providing a transgenic animal whose genome comprises human immunoglobulin genes and isolating nucleic acids encoding antibody chains from lymphatic cells.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Human, antibody, immunoglobulin, interleukin 8; IL8; immunogen; human antibody phage display library; immunisation; transgenic animal;
                                                                                                                                                                                                                                                                                                                                Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Mice of genotype Hco7 heavy chain oligonucleotide PCR primer #952
                                                                                                                                                                                                                                                                                                                                ö
                                                                                                                                                                                                                                                                              / Match 0.3%; Score 15.8; DB 1; Length 20; Local Similarity 89.5%; Pred. No. 3.3e+02; les 17; Conservative 0; Mismatches 2: Timable
                                                                                                                                                                                                                                                Sequence 20 BP; 8 A; 2 C; 7 G; 3 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                (BIOS-) BIOSITE DIAGNOSTICS INC.
(GENP-) GENPHARM INT SUBSIDIARY OF MEDAREX INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Lonberg N;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Example 3; Page 56; 161pp; English.
                                                                                                                                                                                                                                                                                                                                                                4079 GGTTCCAGTTGCCAATTTC 4097
                    Disclosure, Col 73; 80pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Gray J,
                                                                                                                                                                                                                                                                                                                                                                                        20 GCTTCCAGTTTCCAATTTC 2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AAH29961 standard; DNA; 20 BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        99US-0157415P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    02-OCT-2000; 2000WO-US027237
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Buechler J, Valkirs G,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              WPI; 2001-335567/35
                                                                                                                                                                                                              -cancerous cells
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          human antibody
PCR primer; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        WO200125492-A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        02-OCT-1999;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          01-DEC-1999;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            19-JUL-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              12-APR-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Mus sp.
Synthetic.
                                                                                                                                                                                                                                                                                          Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AAH29961:
                                                                                                                                                                                                                                                                                                        Best Loca
Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                            RESULT 450
ઠે
```

```
ö
                display library using this method means there is no need to immunise humans with antigens, and the difficulties faced with immortalising B cells are avoided. AAH29958 to AAH30066 and AAB74994 to AAB75056 represent sequences used in the exemplification of the present invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          The invention relates to somatic and germ line mutations in the multiple tumour suppressor (MTS) gene in human cancer. The invention also relates to therapy of human cancer which have a mutation in the MTS gene, including gene therapy, protein replacement therapy, and protein mimetics. The MTS sequences are useful for diagnosing predisposition to human cancer or for diagnosing and prognosing predisposition to human cancer or for diagnosing and prognosing predisposition to human cancer or LL and cancers of pancreas, lymphoma, glioma, Hodgkin's lymphoma, CLL and cancers of pancreas, breast, thyroid, ovary, uterus, tessis, kidney, stomach and rectum. They are also used for screening drugs for cancer treatment. The present sequence is 42F primer used for amplifying human MTS1 exon 2 sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Human; multiple tumour suppressor; WTS1; cytostatic; somatic mutation; germ line mutation; gene therapy; melanoma; leukaemia; astrocytoma; CLL; glioblastoma; lymphoma; glioma; Hodgitin's lymphoma; cancer; rectum; pancreas; breast; thyroid; ovary; uterus; testis; kidney; stomach;
a human monoclonal antibodies
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Novel multiple tumor suppressor proteins useful for diagnosis and prognosis of human cancer and for screening drugs for cancer treatment.
                                                                                                                                                                           Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                           Human multiple tumour suppressor 1 exon 2 amplifying primer, 42F.
                                                                                                                                                                           ;
0
                                                                                                                                    Score 15.8; DB 1; Length 20;
Pred. No. 3.3e+02;
0; Mismatches 2; Indels
                                                                                                     Sequence 20 BP; 2 A; 4 C; 10 G; 4 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Sequence 20 BP; 8 A; 2 C; 7 G; 3 T; 0 U; 0 Other;
may be prepared. Production of
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Example 8; Col 69-70; 71pp; English.
                                                                                                                                                                                                            366 CCTCCACCAACAGCCCATC 384
                                                                                                                                                                                                                                  19 CCTCCACCAAGGGCCCATC 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      94US-00214582.
94US-00215086.
94US-00215087.
94US-00227369.
94US-00251938.
                                                                                                                                        0.3%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          98US-00120131
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 95US-00486047
                                                                                                                                                        89.5%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    (MYRI-) MYRIAD GENETICS INC.
                                                                                                                                                                                                                                                                                                                                    AAD04699 standard; DNA; 20
                                                                                                                                                                                                                                                                                                                                                                                                        (first entry)
                                                                                                                                                                         17; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          WPI; 2001-289831/30.
                                                                                                                                                          Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  primer; ss
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                        04-JUL-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    US6218146-B1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         22-JUL-1998;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          18-MAR-1994;
18-MAR-1994;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             14-APR-1994;
01-JUN-1994;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 07-JUN-1995;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       17-APR-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            18-MAR-1994
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                17-MAR-1995
                                                                                                                                                                                                                                                                                                                                                                     AAD04699;
                                                                                                                                      Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Ä
                                                                                                                                                                         Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Kamb
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  PCR.
                                                                                                                                                                                                                                                                                                                 AAD04699/
 888888
                                                                                                                                                                                                            ઠ
                                                                                                                                                                                                                                           g
```

```
Kamb A;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Best Loc
Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      RESULT 454
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AAL37733/c
     AAC83077/
                          ઠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   g
                          ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              The present invention describes a method for detecting the presence of polymorphisms associated with inflammatory bowel diseases such as ulcerative colitis and Crohn's disease. The methods can be used to detect the presence of genetic polymorphisms associated with inflammatory bowel disease and correlating their occurrence with disease states. They may be used in this way for phenotypic correlations, forensics, paternity testing, medicine and genetic analysis. The present sequence is a polymorphic site described in the exemplification of the invention
                                                                                                                                                                                                       Human; inflammatory bowel disease; Crohn's disease; ulcerative colitis; single nucleotide polymorphism; SNP; chromosome 19p13; paternity test; chromosome 5q31-33; forensic test; gene therapy; ds.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Testing for the presence of polymorphisms associated with inflammatory bowel disease, using a hybridization assay.
                                                                                                                                                                                                                                                                                             /*tag= a
/note= "SNP, optionally insertion or deletion at this
position"
                          Gaps
                                                                                                                                                                                    Human inflammatory bowel disease associated polymorphic site #529
                          ö
     Length 20;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   0.3%; Score 15.8; DB 1; Length 20;
85.0%; Pred. No. 3.3e+02;
     Score 15.8; DB 1; Length 2
Pred. No. 3.3e+02;
// Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    X,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Siminovitch
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Sequence 20 BP; 17 A; 0 C; 2 G; 0 T; 0 U; 1 Other;
                          0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Rioux J,
                                                                                                                                                                                                                                                                                                                                                                                                                                  (WHED ) WHITEHEAD INST BIOMEDICAL RES. (ELLI-) ELLIPSIS BIOTHERAPEUTICS CORP.
                                                                                                                                                                                                                                                                       Location/Qualifiers
                                             4079 GGTTCCAGTTGCCAATTTC 4097
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Claim 1; Page 61; 463pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Lander ES,
                                                                  a
                                                                                                                      AAH91454 standard; DNA; 20 BP.
   0.3%;
                                                           GCTTCCAGTTTCCAATTTC
                                                                                                                                                                                                                                                                                                                                                                                                     10-DEC-1999; 99US-0170257P.
                                                                                                                                                                                                                                                                                                                                                                                11-DEC-2000; 2000WO-US033632
                                                                                                                                                                (first entry)
Query Match
Best Local Similarity 89.5
Matches 17; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Hudson TJ,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        WPI; 2001-367874/38.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Local Similarity
les 17; Conserv
                                                                                                                                                                                                                                                                                                                                       WO200142511-A2
                                                                                                                                                                                                                                                                                   misc_feature
                                                                                                                                                                                                                                                   Homo sapiens
                                                                                                                                                                09-OCT-2001
                                                                                                                                                                                                                                                                                                                                                           14-JUN-2001
                                                                                                                                           AAH91454;
                                                                  20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Daly M,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Best Loca
Matches
                                                                                                 RESULT 452
                                                                                                            AAH91454
                                                                                                                       8
                                                                용
```

```
New multiple tumor suppressor 2-specific antibodies useful for detecting differences in the absence of the peptides or mutant gene products, or
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            The present invention relates to an antibody or its fragment that specifically binds to a human multiple tumour suppressor (WTS). The invention is useful for detecting differences in the absence of WTS peptides, to screen a tissue or to detect mutant MTS gene products. The antibodies will immunoprecipitate MTS proteins from solution as well as react with MTS protein on Western or immunoblots of polyacrylamide gels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Gарв
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Ophthalmological, cataract; crygs gene; lesion; crystalline lens;
therapy; human; PCR; primer; 88.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ô
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          0.3%; Score 15.8; DB 1; Length 20;
llarity 89.5%; Pred. No. 3.3e+02;
Conservative 0; Mismatches 2; Indele
                                                                                                                                                         MTS; Multiple Tumour Suppressor; cancer; antibody; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Sequence 20 BP; 8 A; 2 C; 7 G; 3 T; 0 U; 0 Other;
                                                                                                                    Primer 42F for screening exon 2 in MTS1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Example 8; Col 71; 71pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             4079 GGTTCCAGTTGCCAATTTC 4097
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Crygs gene related PCR primer #7
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ~
                                                                                                                                                                                                                                                                                                                                                        94US-00214582.
94US-00215086.
94US-00215087.
94US-00227369.
94US-00251938.
  BP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ВР
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      GCTTCCAGTTTCCAATTTC
                                                                                                                                                                                                                                                                                                                     98US-00120128
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                95US-00486047
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       GENETICS INC.
AAC83077 standard; DNA; 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AAL37733 standard; DNA; 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    (first entry)
                                                                            entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     for screening tissues.
                                                                            (first
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      WPI; 2001-014867/02.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Local Similarity
nes 17; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       (MYRI-) MYRIAD
                                                                                                                                                                                                  Homo sapiens
                                                                                                                                                                                                                                                                                                                     22-JUL-1998;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Ното варіеля
                                                                                                                                                                                                                                        US6140473-A.
                                                                                                                                                                                                                                                                             31-OCT-2000
                                                                                                                                                                                                                                                                                                                                                            18-MAR-1994,
                                                                                                                                                                                                                                                                                                                                                                                                                                                             17-MAR-1995,
07-JUN-1995,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    19-JUL-2002
                                                                            23-FEB-2001
                                                                                                                                                                                                                                                                                                                                                                               18-MAR-1994
18-MAR-1994
                                                                                                                                                                                                                                                                                                                                                                                                                      14-APR-1994
                                                                                                                                                                                                                                                                                                                                                                                                                                             01-JUN-1994
                                     AAC83077;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AAL37733;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Query Match
```

ö

Gaps

ö

3; Indels

0; Mismatches

Conservative

5025 AAAAAAAAAAAAAAAA 5044

1 AAAAAGAAAANAAAGAAAA 20

g

ઠે

```
ABK68899/
                                                                                                                                                                                                                            셤
                                                                                                                                                               à
                                                                                                                                                                                                                                                                                                              ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Mammary gland bioreactor; transgenic; goat; animal; ALA; PCR; primer; ss.
                                                                                                                                                                                            variation
                                                                                                                           Diagnosis and treatment of lesion of crystalline lens by using crygs gene and its product in pharmaceutical compositions, particularly for therapy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   New method of preparing mammary gland bioreactor with macrofragment DNA for implementing site-specific and fixed time expression of target genes in mammary glands and producing transgenic animals.
                                                                                                                                                                                                                                       oŧ
                                                                                                                                                                                The invention relates to a method for the diagnosis of cataract susceptibility in an individual. The method comprises detecting variat: in the crygs gene, its transcript and/or protein of the individual by comparing with the normal gene to indicate the higher possibility in suffering from cataract. The crygs gene and gene-encoded protein are useful in the diagnosis and in pharmaceutical compositions for the treatment of a lesion of a crystalline lens, particularly for the cataract. This polymucleotide sequence represents an oligonucleotide related to the crygs gene of the invention
                                                                                                                                                                                                                                                                                                               Gaps
                                                                                          ï
                                                                                          H
                                                                                                                                                                                                                                                                                                               ;
0
                                                                                         Jin Y,
                                                                                                                                                                                                                                                                                            0.3%; Score 15.8; DB 1; Length 20; 89.5%; Pred. No. 3.3e+02;
                                                                                                                                                                                                                                                                                                               Indels
                                                                                            Sulitang Y,
                                                                                                                                                                                                                                                                                                                                                                                                                                                    Mammary gland bioreactor related oligonucleotide #9.
                                                                                                                                                                                                                                                                                                                5;
                                                                                                                                                                                                                                                                           Sequence 20 BP; 5 A; 5 C; 3 G; 7 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                LTD SHANGHAI
                                                                                                                                                                                                                                                                                                              0; Mismatches
                                                                           CENT BIOTECHNOLOGY
                                                                                            Jin M,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  (ZHON-) ZHONGLU BIOLOGICAL ENG CO
                                                                                                                                                                                                                                                                                                                                  4343 CTGGCTCAGATATGAAAAT 4361
                                                                                                                                                                   Example 1; Page 8; 28pp; Chinese.
                                                                                            Yan S,
                                                                                                                                                                                                                                                                                                                                                    ~
                                                                                                                                                                                                                                                                                                                                                                                                 BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              22-MAY-2000; 2000CN-00115793.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 22-MAY-2000; 2000CN-00115793
                                                                                                                                                                                                                                                                                                                                               CTGGCTTAGACATGAAAT
                                       24-AUG-2001; 2001WO-CN001274
                                                        25-AUG-2000; 2000CN-00119756
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Chen J;
                                                                                                                                                                                                                                                                                                                                                                                                  AAL45671 standard; DNA; 20
                                                                                                                                                                                                                                                                                                                                                                                                                                      (first entry)
                                                                                                                                                                                                                                                                                                                  17; Conservative
                                                                                             D,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      WPI; 2002-281676/33.
                                                                            (SHAN-) SHANGHAI RES
                                                                                              Zhao
                                                                                                             WPI; 2002-427092/45
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Wang K,
                                                                                                                                                                                                                                                                                               Query Match
Best Local Similarity
Matches 17; Conserv
                                                                                              Bu L,
     WO200240667-A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Unidentified
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CN1324952-A
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               05-DEC-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                      11-JUN-2002
                                                                                                                                                     cataract
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Cheng G,
                                                                                                                                                                                                                                                                                                                                                      20
                                                                                                                                                                                                                                                                                                                                                                                                                    AAL45671
                                                                                             Kong X,
                                                                                                                                                                                                                                                                                                                                                                                  455
                                                                                                                                                                                                                                                                                                                                                                                                    g
                                                                                                                                                                                                                                                                                                                                     ઠે
```

```
The present invention relates to antisense compounds and methods for modulating the expression of human phosphorylase kinase beta. The antisense compounds, partitularly antisense oligonucleotides, target and inhibit the expression of human phosphorylase kinase beta. The antisense compounds are useful for inhibiting the expression of human phosphorylase
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            /note= "OTHER= Phosphorothioate internucleotide linkages, optionally bases 1-5 and 16-20 are 2'-methoxyethoxy (2'-MOE) bases, where the 2'-MOE cytidines are also 5'methylcytidines"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Novel antisense oligonucleotide which inhibits expression of phosphorylase kinase beta, useful for treating metabolic disorder e.g. diabetes, prevent or delay infection, inflammation or tumor formation.
                                                                           bioreactor using a large fragment of DNA, comprising injecting the DNA bioreactor using a large fragment of DNA, comprising injecting the DNA bioreactor using a fertilised ovum and transferring the ovum into a goat, where the target gene in the macrofragment has site-specific expression in the mammary gland of the goat. The method is useful for effectively implementing site-specific and fixed time expression of target genes in mammary glands and producing transgenic animals e.g. goats. The present sequence is an oligonucleotide described in the exemplification of the invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Gaps
                                                        present invention relates to a method of preparing a mammary
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Human; phosphorylase kinase beta; metabolic disorder; diabetes; infection; inflammation; tumour formation; antidiabetic; antiinflammatory; cytostatic; phosphorothioate; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Human phosphorylase kinase beta antisense oligonucleotide #12.
                                                                                                                                                                                                                                                                                                                                                                                                                0.3%; Score 15.8; DB 1; Length 20; 89.5%; Pred. No. 3.3e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Indels
                                                                                                                                                                                                                                                                                                                                                          Sequence 20 BP; 6 A; 4 C; 4 G; 6 T; 0 U; 0 Other;
3; Page 12(Disclosure); 20pp; Chinese.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1374 TGGACATTTTTTCCCTGAA 1392
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Claim 3; Page 83; 132pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   /mod_base= OTHER
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  BP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  12-SEP-2001; 2001WO-US028586.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             14-SEP-2000; 2000US-00662250
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ABK68899 standard; DNA; 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Ø
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                      Query Match
Best Local Similarity 89.5
Matches 17; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 /*tag=
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         (ISIS-) ISIS PHARM INC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Wyatt JR;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      WPI; 2002-351873/38.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     WO200222637-A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Key
modified_base
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                21-MAR-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  02-JUL-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Monia BP,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ABK68899;
               Example
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         RESULT 456
```

gibbs-10-667-022-4.rng

```
ô
                 particularly a human suspected of having or being prone to a disease or condition associated with expression of phosphorylase kinase beta such as a metabolic disorder e.g. diabetes. The compounds are useful for to prevent or delay infection, inflammation or tumour formation. The antisense compounds are useful in the preparation of a pharmaceutical formulation. They are highly specific, have an enhanced affinity for the humans. ABK68888-ABK6995 represent human phosphorylase kinase beta
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             or mouse tumor associated with
                                                                                                                                                                                                                                                                                     antisense oligonucleotides which comprise a phosphorothioate backbone
                                                                                                                                                                                                                                                                                                                                                                                                                                                     Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Tumour necrosis factor receptor 2; TWFR2; antisense oligonucleotide; phosphorothioate; 2'-O-methoxyethyl; ss.
  kinase beta in human cells or tissues and for treating an animal.
                                                                                                                                                                                                                                                                                                                                                                                                                                                     ö
                                                                                                                                                                                                                                                                                                                                                                                           0.3%; Score 15.8; DB 1; Length 20; 89.5%; Pred. No. 3.3e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                  2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       New compounds antisense to nucleic acid encoding human necrosis factor receptor 2 are useful to treat disease mouse tumor necrosis factor receptor 2 expression.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                /*tag= c
/mod_base= OTHER
/note= "2'-O-methoxyethyl nucleotides"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         note= "2'-0-methoxyethyl nucleotides"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Mouse TNFR2 antisense oligonucleotide SEQ ID NO:138
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          note= "phosphorothioate linkages"
                                                                                                                                                                                                                                                                                                                                      Sequence 20 BP; 6 A; 4 C; 5 G; 5 T; 0 U; 0 Other,
                                                                                                                                                                                                                                                                                                                                                                                                                                                  0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         3672 TCTTACATACAGCCGAATT 3690
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               OTHER
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           'mod base= OTHER
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TCTTGCATACAGGCGAATT 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Claim 3; Col 50; 69pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             BP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               2001US-00844634.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        27-APR-2001; 2001US-00844634
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1. .20
/*tag= b
/mod_base= (
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ABQ74888 standard; DNA; 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ø
                                                                                                                                                                                                                                                                                                                                                                                                                                                  Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                16. .20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 *tag=
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       (ISIS-) ISIS PHARM INC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Watt AT;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                WPI; 2002-606814/65.
                                                                                                                                                                                                                                                                                                                                                                                        Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Key
modified_base
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    modified base
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   modified base
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               27-APR-2001;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Mus musculus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            US6410324-B1
                                                                                                                                                                                                                                                                                                                                                                                                                                            17;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      24-OCT-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Bennett CF,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                25-JUN-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              13
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ABQ74888
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   RESULT 457
                                                                                                                                                                                                                                                                                                                                                                                                                                               Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ABQ74888/c

ID ABQ74

XX AGQ74

XX AGQ74

XX AGQ74

XX AGQ74

XX AGQ74

XX Tumo

XX Mus H

FT Modi

FT
88888888888888888
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            8
```

The present invention describes compounds of 8-30 nucleobases antisense

```
ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       The present invention relates to humanized antibodies against the surface antigen S of hepatitis B virus (HBV). The humanized antibodies comprise heavy and light chains, which have sequences of mouse origin at the heavy and light Complementarity Determining Regions (CDR) 1-3 (HCDR), HCDR2, HCDR3, LCDR1, LCDR2 and LCDR3). In addition, human anti-mouse antibody (HRMA) response is minimized by eliminating peptide sequences from heavy chain of the above humanized antibody which bind Major Histocompatibility complex (MHC) class II molecules. The antibodies are useful in preventing and/or treating hepatitis B virus infection in humans.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ö
to a nucleic acid encoding human or mouse tumour necrosis factor receptor 2 (TURE2). Also described is a method for inhibiting expression of human or mouse TNFR2 comprising contacting cells or tissues in vitro with one of the claimed compounds. The antisense compounds are used to treat a disease or condition associated with expression of TNFR2. The present sequence represents a mouse TNFR2 antisense chimeric phosphorothioate oligonucleotide, which is given in the present invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         New humanized heavy or light chain antibody that specifically binds to the surface antigen S of hepatitis B virus (HBV), useful for preventing
                                                                                                                                                                                                                                Gape
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Virucide, hepatotropic, vaccine, gene therapy, humanized antibody, surface antigen S; hepatitis B virus, HBV; heavy chain; light chain, mouse; Complementarity Determining Region; CBV; HCDR1; HCDR2; HCDR3; hepatitis B virus infection; PCR; primer; 89.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Gapa
                                                                                                                                                                                                                                ô
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ö
                                                                                                                                                                                          0.3%; Score 15.8; DB 1; Length 20;
89.5%; Pred. No. 3.3e+02;
tive 0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Score 15.8; DB 1; Length 20;
Pred. No. 3.3e+02;
0; Mismatches 2; Indel8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Sequence 20 BP; 2 A; 4 C; 10 G; 4 T; 0 U; 0 Other;
                                                                                                                                                      Sequence 20 BP; 2 A; 8 C; 3 G; 7 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Heavy chain variable mutant PCR primer, SEQ ID 6.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           (KORE-) KOREA RES INST BIOSCIENCE & BIOTECHNOLOG.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Example 1; SEQ ID NO 6; 97pp; English
                                                                                                                                                                                                                                                                      4489 CAGAAAGTAGGACCAAGTG 4507
                                                                                                                                                                                                                                                                                                          N
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             the Burface antigen S of hepat:
and/or treating HBV infection.
                                                                                                                                                                                                                                                                                                          CAGCAAGTAGGAGCAAGTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             04-OCT-2001; 2001WO-KR001657.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 02-OCT-2000; 2000KR-00057891.
29-SEP-2001; 2001KR-00060966.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            0.3%;
llarity 89.5%;
Conservative
                                                                                                                                                                                                                                                                                                                                                                                                          ADG24459 standard; DNA; 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      (first entry)
                                                                                                                                                                                        Query Match 0.3
Best Local Similarity 89.5
Matches 17; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       WPI; 2002-599792/64.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Local Similarity
nes 17; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   WO200259318-A1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 H, Kim K;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      26-FEB-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     01-AUG-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Synthetic.
                                                                                                                                                                                                                                                                                                          20
                                                                                                                                                                                                                                                                                                                                                                                                                                                ADG24459;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Query Match
                                                                                                                                                                                                                                                                                                                                                                  RESULT 458
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Hong
                                                                                                                                                                                                                                                                                                                                                                                        ADG24459/
    ន្តដ្ឋប្បវត្តិប្តូប្បវត្តិ
                                                                                                                                                                                                                                                                                                                                                                                                                            ò
                                                                                                                                                                                                                                                                                                      셤
```

```
Synthetic linker sequence for heavy chain variable region PCR primer
   8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          g
                                                                                                                                                                                                                                                                                                                                                                                                                                                              The present invention relates to humanized antibodies against the surface antigen S of hepatitis B virus (HBV). The humanized antibodies comprise heavy and light chains, which have sequences of mouse origin at the heavy and light Complementarity Determining Regions (CDR) 1-3 (HCDR1, HCDR2, HCDR3, LCDR1, LCDR2 and LCDR3). In addition, human anti-mouse antibody (HRMA) response is minimized by eliminating peptide sequences from heavy chain of the above humanized antibody which bind Major Histocompatibility Complex (MHC) class II molecules. The antibodies are useful in preventing and/or treating hepatitis B virus infection in humans.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ö
                                                                                                                                                                                                                                                                                                                                                                                                  New humanized heavy or light chain antibody that specifically binds to the surface antigen S of hepatitis B virus (HBV), useful for preventing and/or treating HBV infection.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Gaps
                                                                                                                                                        Virucide, hepatotropic; vaccine; gene therapy; humanized antibody; surface antigen S; hepatitis B virus; HBV; heavy chain; light chain; mouse; Complementarity Determining Region; CDR; HCDR1; HCDR2; HCDR3; LCDR1; LCDR3; hepatitis B virus infection; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Score 15.8; DB 1; Length 20; Pred. No. 3.3e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   2; Indels
                                                                                                                                      Humanized antibody HZII-H67 related oligonucleotide.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Sequence 20 BP; 4 A; 10 C; 4 G; 2 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                        (KORE-) KOREA RES INST BIOSCIENCE & BIOTECHNOLOG.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  0; Mismatches
CCTCCACCAACAGCCCATC 384
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      366 CCTCCACCAACAGCCCATC 384
                                                                                                                                                                                                                                                                                                                                                                                                                                             Example 1; Fig 1; 97pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CCTCCACCAAGGGCCCATC 20
              CCTCCACCAAGGGCCCATC 1
                                                                        ADG24508 standard; DNA; 20 BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             BP,
                                                                                                                                                                                                                                                                                   04-OCT-2001; 2001WO-KR001657
                                                                                                                                                                                                                                                                                                        02-OCT-2000; 2000KR-00057891
29-SEP-2001; 2001KR-00060966
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ch 0.3%;
1 Similarity 89.5%;
17; Conservative (
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ABX13334 standard; DNA; 20
                                                                                                                 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     (first entry)
                                                                                                                                                                                                                                                                                                                                                                                WPI; 2002-599792/64.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                           Hong H, Kim K;
                                                                                                                                                                                                                                           WO200259318-A1.
                                                                                                                                                                                                                         Homo sapiens.
                                                                                                                 26-FEB-2004
                                                                                                                                                                                                                                                               01-AUG-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     20-MAY-2003
                                                                                                                                                                                                             Synthetic
 366
                                                                                            ADG24508;
                    19
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ABX13334;
                                                  RESULT
                                                                                 ઠ
                    셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            HXXXEX
```

```
The invention relates to a DNA construct for expressing in insect cells, a complete antibody light or heavy chain derived from the corresponding corresponding to a complete antibody light chain derived from the corresponding single chain Fv. For a vector for expression of a light chain (including one from a single chain Fv fragment), the cassette chain chain of the desired antibody. For a vector for a expression of light chain of the desired antibody. For a vector for a expression of heavy chain, the cassette includes the same signal sequence encoding the leavy chain of the desired antibody, and the coding construct also contains a promoter and a transcription terminator. Also construct also contains a promoter and a transcription terminator. Also included are the transformed insect cell expressing a desired antibody, and an Igd1 antibody derived from the expression in an insect cell of the construct, a passive vaccine against an infections agent recognised by the Igg1 antibody derived from the expression in an insect cell of the construct, a passive vaccine against an infections agent recognised by inserting the Igg1 antibody from a corresponding for for obtaining a conformationally active Igg1 antibody from a corresponding passive vaccine against an infections agent in a construct to isolate the Igg1 antibody in the insect cells are TN cells. The Igg1 antibody is useful for detecting an infections agent in a construct to isolate the Igg1 antibody is also useful for treating an infection caused by an agent recognised by the Igg1 antibody is also useful for detecting antifect of cantaining an infection saused by an agent recognised by the Igg1 antibody is also useful for detecting antigens specific for the antibodies in a sample suspected of containing such antigens, and for passive immunisation, especially in humans, without negative immunisation, especially in humans, without negative immunisation in the interpretating antigens and anaphylactic possive immunisation is such as serum sickness or anaphylactic pr
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Novel DNA construct for obtaining conformationally active immunoglobulin G1 antibody from Fab fragment, has an antibody light or heavy chain derived from Fab fragment or a light chain derived from single chain Fv.
ss; PCR; primer; heavy chain variable region; insect cells; antibody; Fab fragment; single chain Fv; immunoglobulin; IgG1; passive vaccine; infection; negative immune reaction; serum sickness; anaphylactic shock.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       puence is a synthetic linker portion of a PCR primer preceded by part
the heavy chain variable region sequence, used in the manufacture of
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Score 15.8; DB 1; Length 20; Pred. No. 3.3e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Sequence 20 BP; 2 A; 4 C; 10 G; 4 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Example 1; Page 12; 29pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 366 CCTCCACCAACAGCCCATC 384
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             the construct of the invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       cerceaceaagggcceare 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        08-MAR-2002; 2002US-00094546
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          08-MAR-2001; 2001US-0274164P
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     SS.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          0.3%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Guttieri MC, Schmaljohn
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Query Match 0.3
Best Local Similarity 89.5
Matches 17; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                (GUTT/) GUTTIERI M C. (SCHM/) SCHMALJOHN C
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  WPI; 2003-329047/31
                                                                                                                                                                                                                                                                                 US2002197677-A1.
                                                                                                                                                                                                                                                                                                                                                                             26-DEC-2002
                                                                                                                                                                                           Synthetic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       19
```

```
one or more loci
                        WO2002100246-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   WO2003041657-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Key
modified_base
     Homo sapiens.
                                            19-DEC-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Synthetic.
                                                                                                                                                                                                                                                                                                                                                                                                                                                       20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ADB99900;
    셤
                                                                                                                                                                                                                                                                                                                                                                                                                                   à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ö
1
                                                                                                                                                                                                                                                                                                                                                                                                          A new compound, which is 8-50 nucleobases in length targeted to a nucleic acid molecule encoding urokinase plasminogen activator, specifically hybridises with and inhibits the expression of urokinase plasminogen activator. The compound is useful for preparing a composition for treating (e.g. by gene therapy) hyperproliferative disorder, cancer e.g., breast, colon, bone, brain, ovary, cervix, endometrium, stomach or kidney cancer, or tumour metastasis. This sequence represents an antisense oligonucleotide used to modulate expression of urokinase plasminogen
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        PCR; primer; ss; neoplastic; pre-neoplastic; heterozygosity; cytostatic; urothelial neoplasia; MTS1; human.
                                                                                                                                                                                                                                                                                                                                    New antisense compound, useful for preparing a composition for treating hyperproliferative disorders, cancer e.g., breast, colon, bone, brain, ovary, cervix, endometrium, stomach or kidney cancer, or tumor
                                                                                                     Urokinase plasminogen activator; gene therapy; cancer; hyperproliferative disorder; cancer; brone cancer; brone cancer; brone cancer; brone cancer; endere enders; ender; ender; ender; antisme cancer; stomer soncer; stomer stomer; antisense oligonucleotide; se.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Gарв
                                                                                   Mouse urokinase plasminogen activator antisense oligonucleotide #17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     / Match 0.3%; Score 15.8; DB 1; Length 20; Local Similarity 89.5%; Pred. No. 3.3e+02; nes 17; Conservative 0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Seguence 20 BP; 4 A; 7 C; 4 G; 5 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                         Example 16; Page 93; 153pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               506 TTTCCCGAGGCCTAGGGTA 524
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ,
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TTTCCCCAGGCCTAGGCTA 19
                                                                                                                                                                                                                                                                                                Watt AT;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Human MTS1 exon 2 PCR primer 1.
                       ABX17785 standard; DNA; 20 BP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       BP
                                                                                                                                                                                                                                18-MAR-2002; 2002WO-US008112.
                                                                                                                                                                                                                                                     30-MAR-2001; 2001US-00821972.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ABZ25516 standard; DNA; 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               (first entry)
                                                              (first entry)
                                                                                                                                                                                                                                                                         (ISIS-) ISIS PHARM INC
                                                                                                                                                                                                                                                                                             Freier SM,
                                                                                                                                                                                                                                                                                                                 WPI; 2003-058441/05.
                                                                                                                                                                                      WO200279515-A1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                28-MAR-2003
                                                                                                                                                                                                            10-OCT-2002
                                                                                                                                                                                                                                                                                                                                                                    metastasis.
                                                                                                                                                                                                                                                                                             Baker BF,
                                                                                                                                                                    Synthetic.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                activator
                                            ABX17785;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    -
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ABZ25516;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   462
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Matchee
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  셤
```

```
ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    The invention relates to a novel method for detecting a cell with a neoplastic or pre-neoplastic phenotype, comprising testing a sample cell for the presence of loss of heteroxygosity at one or more loci on one or more chromosomes. The chromosomes are selected from a group of chromosome indicative of a neoplastic or pre-neoplastic phenotype. The method of the invention has cytostatic activity. Detecting a cell with a neoplastic or pre-neoplastic phenotype is useful for diagnosing, monitoring or treating pre-neoplastic phenotype is useful for diagnosing, monitoring or treating urchhelial neoplasia. The pregresent sequence represents a PCR primer used in the invention to amplify exon 1 of the MTS1 gene
                                                                                                                                                                                                                                                                                                                                                                                Detecting a cell with a neoplastic or pre-neoplastic phenotype, useful for diagnosing or treating neoplasia or pre-neoplastic conditions, comprises testing the cell for the presence of loss of heterozygosity at
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     /mod_base= OTHER
/note= "This oligonucleotide has a phosphorothioate
backbone and 2-'methyoxyethyl (2'-MOE) wings at the 5'
and 3' ends, which are 5 nucleotides in length. Also all
cytidine residues are 5-methylcytidines"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Vitamin D nuclear receptor antisense oligonucleotide, SEQ ID 39.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Query Match 0.3%; Score 15.8; DB 1; Length 20; Best Local Similarity 89.5%; Pred. No. 3.3e+02; Matches 17; Conservative 0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Cytostatic; gene therapy; antisense oligonucleotide; human; vitamin D nuclear receptor; cancer; developmental disorder; phosphorothioate; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Sequence 20 BP; 8 A; 2 C; 7 G; 3 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Example 5; Page 96; 248pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             4079 GGTTCCAGTTGCCAATTTC 4097
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          GCTTCCAGTTTCCAATTTC 2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ВP
11-JUN-2002; 2002WO-US018427.
                                                                        12-JUN-2001; 2001US-0297813P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ADB99900 standard; DNA; 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1. .2v
/*tag= a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               04-DEC-2003 (first entry)
                                                                                                                                                 (TEXA ) UNIV TEXAS SYSTEM
                                                                                                                                                                                                                              Czerniak B, Johnston
                                                                                                                                                                                                                                                                                                            WPI; 2003-156900/15.
```

```
cyclin-dependent kinase 4 inhibitor (CDK4I) genes and their corresponding
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           allele
                                                                                          Best Loca
Matches
                                                                                                                                                                 RESULT 465
                                                                                                                                                                            ADF83451,
                                                                                                                                                                                              셤
     88888888
                                                                                                                     Š
                                                                                                                                                                                                                                                                                             ;
0
                                                                                                                                                                        The present invention relates to novel antisense oligomucleotides (ADB99875-ADB9952) which are targeted to a human vitamin D nuclear receptor coding sequence (ADB99864), and specifically hybridizes with and inhibits the expression of vitamin D nuclear receptor. The antisense oligonucleotides are useful for treating an animal having a disease or condition associated with vitamin D nuclear receptor, e.g. cancer or developmental disorder.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                The present invention relates to novel tumour suppressor genes, termed as
                                                                                                                              cancer or
                                                                                                                    New antisense oligonucleotides for modulating vitamin D nuclear receptor gene expression, particularly useful for treating or preventing cancer or developmental disorder, or as diagnostics or research reagents.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   New isolated polynucleotide encoding cyclin-dependent kinase 41, useful for preparing a composition for diagnosing or treating cancer.
                                                                                                                                                                                                                                                                                              Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                         tumour suppressor gene; cyclin-dependent kinase 4 inhibitor;
                                                                                                                                                                                                                                                                                              ö
                                                                                                                                                                                                                                                                        Score 15.8; DB 1; Length 20;
Pred. No. 3.3e+02;
0; Mismatches 2; Indels
                                                                                                                                                                                                                                                       Sequence 20 BP; 4 A; 4 C; 8 G; 4 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                          exon DNA specific primer #1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      gene therapy; primer; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Disclosure, SEQ ID NO 6, 46pp, English
                                                                                                                                                            Claim 3; SEQ ID NO 39; 122pp; English
                                                                                                                                                                                                                                                                                                                 302 AGAGCTTTCCCAGTTCTCC 320
                                                                                                                                                                                                                                                                                                                                  0
                                                                                                                                                                                                                                                                                                                                                                                  BP
                                                                                                                                                                                                                                                                                                                           20 AGAGCTGTCCCAGCTCTCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                18-JUL-2001; 2001US-00908671
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   97US-00921954
                          13-NOV-2002; 2002WO-US036692
                                             14-NOV-2001; 2001US-0000213
                                                                                                                                                                                                                                                                           Query Match 0.3%;
Best Local Similarity 89.5%;
Matches 17; Conservative
                                                                                                                                                                                                                                                                                                                                                                                   AAD64089 standard; DNA; 20
                                                                                                                                                                                                                                                                                                                                                                                                                        (first entry)
                                                                PHARM INC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Carson DA, Nobori T;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   WPI; 2003-851737/79
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      (CARS/) CARSON D A. (NOBO/) NOBORI T.
                                                                                  Dobie K,
                                                                                                     WPI; 2003-468578/44.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            US2003138928-A1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        cancer;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   26-AUG-1997;
                                                                                                                                                                                                                                                                                                                                                                                                                                           Human CDK4I'
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Homo sapiens
                                                                ISIS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               24-JUL-2003
                                                                                                                                                                                                                                                                                                                                                                                                                         12-FEB-2004
         22-MAY-2003
                                                                                   Baker BF,
                                                                                                                                                                                                                                                                                                                                                                                                     AAD64089;
                                                                (ISIS-)
                                                                                                                                                                                                                                                                                                                                                                                                                                                              Human;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CDK41;
                                                                                                                                                                                                                                                                                                                                                                 RESULT 464
                                                                                                                                                                                                                                                                                                                                                                                     ઠે
                                                                                                                                                                                                                                                                                                                                    셤
```

```
The present invention relates to a method of identifying a predisposition to melanoma. The method comprises determining whether a human individual carrying a cyclin dependent kinase inhibitor 2h (DKNZA) mutant allele also carries a melanocortin-1 receptor (MCIR) variant allele, where the presence of a MCIR variant allele indicates a predisposition of the individual to melanoma greater than that expected as a consequence of the CDKNZA mutant allele alone. Also disclosed is a kit for identifying a predisposition to melanoma. The kit comprises MCIR gene-specific primers and/or CDKNZA gene-specific primers and MCIR variant allele-specific primers probes and/or CDKNZA mutant allele-specific
                                                                                                                                                                                                                                         ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Identifying a predisposition to melanoma comprises determining whether an individual carrying a cyclin dependent kinase inhibitor 2A (CDKN2A) mutant allele also carries a melanocortin-1 receptor (MCIR) variant
proteins. The polynucleotides are useful for preparing a composition for diagnosing or treating cancer. Sequences of the invention are also useful in gene therapy. The present sequence is human CDK41' exon DNA specific primer used in the invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Predisposition; melanoma; human; cyclin dependent kinase inhibitor 2A;
CDKN2A; mutant allele; melanocortin-1 receptor; MCIR; variant allele;
gene-specific; primer; ss.
                                                                                                                                                                                                                                            Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Gruis NA;
                                                                                                                                                                                                                                            .
0
                                                                                                                                                                                     Length 20;
                                                                                                                                                                                                                                            Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Sturm RA,
                                                                                                                                    Sequence 20 BP; 8 A; 2 C; 7 G; 3 T; 0 U; 0 Other;
                                                                                                                                                                                     0.3%; Score 15.8; DB 1;
89.5%; Pred. No. 3.3e+02;
iive 0; Mismatches 2;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Martin NG,
Frants RR;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Claim 15; SEQ ID NO 5; 30pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Human CDKN2A gene-specific primer #5.
                                                                                                                                                                                                                                                                                                4079 GGTTCCAGTTGCCAATTTC 4097
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Hayward NK,
Bergman W,
                                                                                                                                                                                                                                                                                                                                                  20 GCTTCCAGTTTCCAATTTC 2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    28-MAR-2002; 2002US-00108732
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      28-MAR-2001; 2001US-0279515P
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ٨
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ADF83451 standard; DNA; 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             STURM R A.
GRUIS N A.
VAN DER VELDEN P A
BERGMAN W.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               (first entry)
                                                                                                                                                                                                                 Local Similarity 89.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     BOX N F.
DUFFY D L.
HAYWARD N K.
MARTIN N G.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    WPI; 2003-898522/82
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Box NF, Duffy DL,
Van Der Velden PA,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   FRANTS R R
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              US2003175721-A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                18-SEP-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               26-FEB-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ADF83451;
                                                                                                                                                                                                   Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            (HAYW/)
(MART/)
(STUR/)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      (GRUI/)
(VVEL/)
(BERG/)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          (BOXN/)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   (FRAN/)
```

```
The invention relates to a novel pharmaceutical composition, which has a first active agent comprising an oligonucleotide antisense to the initiation codon, coding region, 5' or 3' end genomic flanking regions, 5' and 3' intron-exon junctions, or regions within 2-10 mucleotides of junctions of genes encoding a polypeptide associated with lung and/or nasal airway dysfunction and a second active agent comprising an entilnflammatory steroid and ubiquinone. A composition of the invention has antilnflammatory, antiallargic, antiasthmatic, hypotenaive, immunosuppressive, and cytostatic activity. The composition may have a use in antisense gene therapy. The composition is useful for treating or preventing a respiratory, lung or malignant disease or condition, also for enhancing the prophylactic or therapeutic respiratory effect of an antiinflammatory steroid in a subject, for reducing or depleting levels of, or reducing sensitivity to adenosine, reducing levels of adenosine receptor, producing bronchodilation, increasing levels of the dispunce or ung surfactant in a subject's tissue, or treating bronchoconstriction,
                                                                                                                                                                                                                                                                                                                      ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Pharmaceutical composition for treating ailments associated with impaired respiration, has oligo(s) antisense to specific gene(s) or its corresponding RNAs, and glucocorticoid or non-glucocorticoid steroid or
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Human; antisense; lung dysfunction; nasal airway dysfunction; antinflammatory steroid; ubiquinone; antinflammatory; antiallergic; antiasthmatic; hypotensive; immunosuppressive; cytostatic; gene therapy; antisense gene therapy; respiratory; lung; adenosine sensitivity; adenosine receptor; bronchodilation; bronchoconstriction; lung allergy;
comprises MCIR sequencing primers and/or CDKN2A sequencing primers. The method is useful for identifying a predisposition to melanoma. The present sequence represents a gene-specific primer that can be used in
                                                                                                                                                                                                                                                                                                                      Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Aguilar D;
                                                                                                                                                                                                                                                                                                                      ö
                                                                                                                                                                                                                                             0.3%; Score 15.8; DB 1; Length 20; 89.5%; Pred. No. 3.3e+02; tive 0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Pabalan J,
                                                                                                                                                                           Seguence 20 BP; 8 A; 2 C; 7 G; 3 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Disclosure; SEQ ID NO 3184; 872pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         lung inflammation; respiratory disease; ds
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Katz E,
                                                                                                         the method of the present invention.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Sandrasagra A, Ka
i, Shahabuddin S;
                                                                                                                                                                                                                                                                                                                                                                                       GGTTCCAGTTGCCAATTTC 4097
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Human oligonucleotide sequence.
                                                                                                                                                                                                                                                                                                                                                                                                                                                             20 GCTTCCAGTTTCCAATTTC 2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ВР
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       23-APR-2002; 2002WO-US013135.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         24-APR-2001; 2001US-0286137P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              (EPIG-) EPIGENESIS PHARM INC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ABZ87942 standard; DNA; 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               (first entry)
                                                                                                                                                                                                                                                                                                                      Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Nyce JW, Li Y, San
Miller S, Tang L,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      WPI; 2003-229219/22.
                                                                                                                                                                                                                                             Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             WO200285308-A2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Ното варіеля
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               17-0CT-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  31-OCT-2002.
                                                                                                                                                                                                                                                                                                              17;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ubiquinone
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ABZ87942;
                                                                                                                                                                                                                                                                                                                                                                                           4079
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       RESULT 466
                                                                                                                                                                                                                                                                                                                      Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ABZ87942
ABZ87942
AZZ87942
AZZ
   8888888
                                                                                                                                                                                                                                                                                                                                                                                                                                                         셤
                                                                                                                                                                                                                                                                                                                                                                                               ઠે
```

```
The invention relates to a novel pharmaceutical composition, which has a first active agent comprising an oligonucleotide antisense to the initiation codon, coding regalon, 5' or 3' end genomic flanking regions, 5' and 3' intron-exon junctions, or regions within 2-10 nucleotides of junctions of genes encoding a polypeptide associated with lung and/or nasal airway dysfunction and a second active agent comprising an natiniflammatory steroid and ubiquinone. A composition of the invention has antiinflammatory, antiallargic, antiasthmatic, hypotensive, immunosuppressive, and cytostatic activity. The composition may have a treat in antisense gene therapy. The composition is useful for treating or preventing a respiratory, lung or malignant disease or condition, also for enhancing the prophylactic or therapeutic respiratory effect of an antiinflammatory steroid in a subject, for reducing or depleting levels antiinflammatory according a reducing sensitivity to adenosine, reducing levels of adenosine receptor, producing bronchodilation, increasing bronchoconstriction,
                                                                                                                                                                                ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Pharmaceutical composition for treating ailments associated with impaired respiration, has oligo(s) antisense to specific gene(s) or its corresponding RNAs, and glucocorticoid or non-glucocorticoid steroid or
lung inflammation, lung allergies, or a respiratory disease or condition. Note: The sequence data for this patent is not represented in the printed specification, but was obtained in electronic format directly from WIPO
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Human; antisense; lung dysfunction; nasal airway dysfunction; antisinflammatory; antiallergic; antisinflammatory; antiallergic; antiasthmatic; hypotensive; immunosuppressive; cytostatic; gene therapy; antisense gene therapy; respiratory; lung; adenosine sensitivity; adenosine receptor; bronchodilation; bronchoconstriction; lung allergy;
                                                                                                                                                                                Gapa
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Aguilar D;
                                                                                                                                                                                ö
                                                                                                                                       0.3%; Score 15.8; DB 1; Length 20;
89.5%; Pred. No. 3.3e+02;
ative 0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Pabalan J,
                                                                                                 Sequence 20 BP; 6 A; 1 C; 10 G; 3 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            lung inflammation; respiratory disease; ds.
                                                            at ftp.wipo.int/pub/published_pct_sequences
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Disclosure, SEQ ID NO 5617; 872pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Sandrabagra A, Katz E,
                                                                                                                                                                                                                        1261 AGAGGAGAGTTGAAGAGAG 1279
                                                                                                                                                                                                                                                             AGGGGAGTGTTGAAGAGAG 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Human oligonucleotide sequence.
                                                                                                                                                                                                                                                                                                                                                                 BP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        23-APR-2002; 2002WO-US013135.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              24-APR-2001; 2001US-0286137P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     (EPIG-) EPIGENESIS PHARM INC.
                                                                                                                                                                                                                                                                                                                                                               ABZ90375 standard; DNA; 20
                                                                                                                                  Ouery Match
Best Local Similarity 89.5
Matches 17; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       WPI; 2003-229219/22
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Tang L,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Li Y,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         WO200285308-A2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 31-OCT-2002.
                                                                                                                                                                                                                                                                                                                                                                                                                                            17-OCT-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ubiquinone.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Ś
                                                                                                                                                                                                                                                                                                                                                                                                      ABZ90375;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Nyce JW,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Miller
                                                                                                                                                                                                                                                                                                                         RESULT 467
                                                                                                                                                                                                                                                                                                                                              ABZ90375
                                                                                                                                                                                                                                                                                                                                                                 8 X G:G G G
                                                                                                                                                                                                                                                           셤
                                                                                                                                                                                                                          ò
```

g ઠે

```
The invention relates to a novel pharmaceutical composition, which has a first active agent comprising an oligonucleotide antisense to the initiation codon, coding region, 5' or 3' end genomic flanking regions, 5' or 3' end genomic flanking regions, or regions within 2-10 nucleotides of junctions of genes encoding a polypeptide associated with lung and/or nasal airway dysfunction and a second active agent comprising an antiinflammatory steroid and ubiquinone, A composition of the invention has antiinflammatory, antiallergic, antiasthmatic, hypotensive, immunosuppressive, and cytostatic activity. The composition may have a immunosuppressive, and cytostatic activity. The composition may have a creventing a respiratory, lung or malignant disease or condition, also for enhancing the prophylactic or therapeutic respiratory effect of an continummatory steroid in a subject, for reducing levels of antiinflammatory steroid in a subject, for reducing levels of continuous or receptor, producing bronchodilation, increasing levels of ubiquinone or lung surfactant in a subject's tissue, or treating bronchoconstriction,
                                                                                                                                                                                  ò,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Pharmaceutical composition for treating ailments associated with impaired respiration, has oligo(s) antisense to specific gene(s) or its corresponding RNAs, and glucocorticoid or non-glucocorticoid steroid or
lung inflammation, lung allergies, or a respiratory disease or condition. Note: The sequence data for this patent is not represented in the printed specification, but was obtained in electronic format directly from WIPO at ftp.wipo.int/pub/published_pct_sequences
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Human, antisense; lung dysfunction; nasal airway dysfunction; antinflammatory steroid; ubiquinone; antinflammatory; antiallergic; antiasthmatic; hypotensive; immunosuppressive; cytostatic; gene therapy; antisense gene therapy; respiratory; lung; adenosine sensitivity; adenosine receptor; bronchodilation; bronchoconstriction; lung allergy; lung inflammation; respiratory disease; ds.
                                                                                                                                                                                    Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Aguilar D;
                                                                                                                                                                                    ö
                                                                                                                                            Score 15.8; DB 1; Length 20;
Pred. No. 3.3e+02;
0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Pabalan J,
                                                                                                                                                8; bb
3.3e+02;
2;
                                                                                                   Sequence 20 BP; 16 A; 4 C; 0 G; 0 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Disclosure; SEQ ID NO 4742; 872pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Sandrasagra A, Katz E,
                                                                                                                                                                                                                               5047 AAAAAAAAAAAAAAA 5065
                                                                                                                                                                                                                                                                     1 AAACAAAAAACAAAAAAA 19
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Human oligonucleotide sequence.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    23-APR-2002; 2002WO-US013135.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          24-APR-2001; 2001US-0286137P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  (EPIG-) EPIGENESIS PHARM INC
                                                                                                                                              0.3%;
                                                                                                                                                                                                                                                                                                                                                                         ABZ89500 standard; DNA; 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                        (first entry)
                                                                                                                                            Query Match
Best Local Similarity 89.5
Matches 17; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      WPI; 2003-229219/22.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Li Y, San
Tang L,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         WO200285308-A2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                          17-OCT-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  31-OCT-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ubiquinone.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Miller S,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Nyce JW,
                                                                                                                                                                                                                                                                                                                                         468
                                                                                                                                                                                                                                                                                                                                       RESULT
```

```
The invention relates to a novel pharmaceutical composition, which has a first active agent comprising an oligonucleotide antisense to the initiation codon, coding region, 5' or 3' end genomic flanking regions, initiation codon, coding region, 5' or 3' end genomic flanking regions, or regions within 2-10 nucleotides of 5' and 3' intron-exon junctions or regions within 2-10 nucleotides of junctions of genes encoding a polypeptide associated with lung and/or nasal airway dysfunction and a second active agent comprising an antinflammatory steroid and ubiquinone. A composition may have a immunosuppressive, and cytostatic activity. The composition may have a immunosuppressive, and cytostatic activity. The composition may have a immunosuppressive, lung or malignant disease or condition, also preventing a respiratory, lung or malignant disease or condition, also for enhancing the prophylactic or therapeutic respiratory effect of an ior in a subject, for reducing levels of adenosine correction, producing bronchodilation, increasing levels of biquinone or receptor, producing bronchodilation, increasing bronchoconstriction,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Pharmaceutical composition for treating ailments associated with impaired respiration, has Oligo(s) antisense to specific gene(s) or its corresponding RNAs, and glucocorticoid or non-glucocorticoid steroid or
                                                                                                                                                                         ö
lung inflammation, lung allergies, or a respiratory disease or condition. Note: The sequence data for this patent is not represented in the printed specification, but was obtained in electronic format directly from WIPO
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Human; antisense; lung dysfunction; nasal airway dysfunction; antiinflammatory steroid; ubiquinone; antiinflammatory; antiallergic; antiathamtic; hypotensive; immunosuppressive; cytostatic; gene therapy; antisense gene therapy; respiratory; lung; adenosine sensitivity; adenosine receptor; bronchodilation; bronchoconstriction; lung allergy;
                                                                                                                                                                         Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Pabalan J, Aguilar D;
                                                                                                                                                                           ..
0
                                                                                                                                       20;
                                                                                                                                                                           Indels
                                                                                                                                     Length
                                                                                               Sequence 20 BP; 7 A; 2 C; 3 G; 8 T; 0 U; 0 Other;
                                                                                                                                     0.3%; Score 15.8; DB 1;
39.5%; Pred. No. 3.3e+02;
ive 0; Mismatches 2;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Disclosure; SEQ ID NO 9285; 872pp; English.
                                                           at ftp.wipo.int/pub/published_pct_sequences
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 inflammation; respiratory disease; ds.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Katz E,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Li Y, Sandrasagra A, Ka
Tang L, Shahabuddin S;
                                                                                                                                                                                                                   390 TCTATGAAGAAGACCCTT 408
                                                                                                                                                                                                                                                       TTTATGAAGAAGACCTTT 19
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Human oligonucleotide sequence.
                                                                                                                                                                                                                                                                                                                                                     BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         23-APR-2002; 2002WO-US013135.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             24-APR-2001; 2001US-0286137P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 (EPIG-) EPIGENESIS PHARM INC
                                                                                                                                                           ilarity 89.5%;
Conservative
                                                                                                                                                                                                                                                                                                                                                     ABZ94043 standard; DNA; 20
                                                                                                                                                                                                                                                                                                                                                                                                                                 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               WPI; 2003-229219/22.
                                                                                                                                                               Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   WO200285308-A2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       31-OCT-2002.
                                                                                                                                                                                   17;
                                                                                                                                                                                                                                                                                                                                                                                                                                 17-0CT-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ubiquinone
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Nyce JW, I
                                                                                                                                                                                                                                                                                                                                                                                             ABZ94043;
                                                                                                                                               Query Match
                                                                                                                                                                                                                                                                                                                     469
                                                                                                                                                                 Best Loca
Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           lung
                                                                                                                                                                                                                                                                                                                     RESULT
                                                                                                                                                                                                                                                                                                                                                           셤
               8 X C C C C C
                                                                                                                                                                                                                           ઠ
```

ABD24172 standard; DNA; 20

respiratory tract inflammation; adenosine sensitivity; lung; cancer; surfactant depletion; antiallergic; antiinflammatory; antiasthmatic; analgesic; hypotensive; immunosuppressive; cycotatic; cyetic fibroais; beta-adrenergic agonist; respiratory disease; pulmonary vasoconstriction; respiratory distress syndrome; allergic rhinitis; pulmonary hypertension; emphysema; chronic obstructive pulmonary disease; cancer; bronchitis; pulmonary transplantation rejection; ss; primer.

hyposecretion; pain,

Human calmodulin 2-derived oligonucleotide SEQ ID 3184.

(first entry)

29-JUL-2004

ABD24172;

bronchoconstriction; allergy;

antisense;

```
ö
lung inflammation, lung allergies, or a respiratory disease or condition. Note: The sequence data for this patent is not represented in the printed specification, but was obtained in electronic format directly from WIPO
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    useful
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         The invention relates to measuring DNA-dependent DNA polymerization in a biological sample and involves measuring the amount of incorporated modified deoxynucleoside triphosphate with the aid of the label of a bound antibody. The method is useful in measuring DNA polymerization for drug susceptibility testing. Sequences ABZ75637-647 represent different templates used for second strand synthesis by HIV reverse transcriptase
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ONA polymerization; drug susceptibility; HIV; reverse transcriptase; RT;
                                                                                                                                                                                                      Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Measuring DNA-dependent DNA polymerization in a biological sample, for drug susceptibility testing, comprises measuring the amount of incorporated modified deoxynucleoside triphosphate with the aid of labeled antibody.
                                                                                                                                                                                                        ö
                                                                                                                                                       Query Match 0.3%; Score 15.8; DB 1; Length 20; Best Local Similarity 89.5%; Pred. No. 3.3e+02; Matches 17; Conservative 0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Query Match 0.3%; Score 15.8; DB 1; Length 20; Best Local Similarity 89.5%; Pred. No. 3.3e+02; Matches 17; Conservative 0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Template (CTGA)5 for second strand synthesis by HIV RT.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Gronowitz S, Shao X;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Sequence 20 BP; 5 A; 5 C; 5 G; 5 T; 0 U; 0 Other;
                                                                                                              Sequence 20 BP; 4 A; 7 C; 4 G; 5 T; 0 U; 0 Other;
                                                               at ftp.wipo.int/pub/published_pct_sequences
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Example 1; Page 31; 36pp; English.
                                                                                                                                                                                                                                                4280 CTCCTCATAGCGTCCATGG 4298
                                                                                                                                                                                                                                                                                           Crccrcaracceccarre 19
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Kaellander C, Pettersson I,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    14-JUN-2002; 2002WO-SE001155.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   14-JUN-2001; 2001US-029773P
                                                                                                                                                                                                                                                                                                                                                                                                          ABZ75637 standard; DNA; 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             (CAVI-) CAVIDI TECH AB
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     WPI; 2003-167535/16.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            WO2002103039-A1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      15-MAY-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         27-DEC-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Synthetic.
                                                                                                                                                                                                                                                                                                                                                                                                                                                         ABZ75637;
                                                                                                                                                                                                                                                                                                                                                               RESULT 470
                                                                                                                                                                                                                                                                                                                                                                                     AB275637

ILD AB27

AAC AB27

XXX AB
8833333
                                                                                                                                                                                                                                                                                         용
                                                                                                                                                                                                                                                ò
```

S

ä

Aguilar

Pabalan J,

Katz E, S,

Sandrasagra A,

Li Y, Sar Tang L,

Miller S,

3 Vyce WPI; 2003-093058/08.

23-APR-2002; 2002WO-US013143. 24-APR-2001; 2001US-0286036P. (EPIG-) EPIGENESIS PHARM INC.

WO200285309-A2 Homo sapiens.

31-OCT-2002.

oligonucleotide containing less percentage of adenosine, targeted t nucleic acids associated with lung airway or lung dysfunction, and

Claim 15; SEQ ID NO 3184; 763pp; English

bronchodilating agent

Pharmaceutical composition for treating asthma, has antisense

```
This invention describes a novel composition (a) a first active agent, comprising oligonucleotides, effective for alleviating bronchoconstruction, respiratory tract inflammation, allergies and reducing adanosine sensitivity, levels of adenosine (A) or (A) receptors, cufficing adanosine sensitivity, levels of adenosine (A) or (A) receptors, surfactant depletion or hyposecretion, when administered to a mammal. The oligonucleotides are derived from a gene encoding or regularing arway or lung ayenestion of a target polypeptide associated with lung airway or lung dysfunction or cancer and can be anti-sense to the corresponding mRNA. The invention also describes a kit, that comprises: (a) a delivery of the invention as antiallergic, antinflammatory, antiathmatic, analgesic, hypotensive, immunosuppressive and cytostatic activity, is a beta-adrenergic agonist. The composition is useful for preventing or treating a respiratory, lung or malignant disease. The administered composition comprises oligo and is administered to reduce the production or availability, or to increase the degradation of the target mRNA or to recease the amount of target polypeptide present in the lungs. The pulmonary obstruction, and/or bronchoonstriction and/or lung inflammation, allergies and/or bronchoonstriction and/or lung inflammation, allergies as the product on a pulmonary viseocometriction, respiratory disterses byndrome, pain, cystic fibrosis, allergic rhintis, pulmonary transplantation rejection, pulmonary infections, become submonary disease, pulmonary transplantation rejection, pulmonary infections, bundoning to the reduced adenosine content of the anti-sense oligos corresponding to the oligonucleotides into products that free adenosine into the system e.g., lung, brain, heart, kidney, etc., tissue environment and thereby, to prevent any unwanted effects due to it
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Sequence 20 BP; 6 A; 1 C; 10 G; 3 T; 0 U; 0 Other;
```

ö

Gaps

ö

4769 TGACTGACTGACTAAATGA 4787

ઢ

RESULT 471

ABD24172

```
55555555555X8
                                                                                                                                                                                                                                            ð
                                                                                                                                                                                                                                                                      g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         This invention describes a novel composition (a) a first active agent, CC comprising oligonucleotides, effective for alleviating comprising oligonucleotides, effective for alleviating comprising oligonucleotides, effective for alleviating comprising adenosine sensitivity, levels of adenosine (A) or (A) receptors, curfactant depletion or hyposecretion, when administered to a mammal. The coligonucleotides are derived from a gene encoding or regulating cypreptide associated with lung airway or lung dysfunction or cancer and can be anti-sense to the corresponding mRNA. The invention also describes a kit, that comprises: (a) a delivery device, in separate containers, (b) the oligonucleotides, (c) instructions for adding a carrier and for use of the kit. The composition of the invention has antiallergic, antiinflammatory, antiasthmatic, analgesic, hypotensive, immunosuppressive and cytostatic activity, is a composition comprises oligo and is administered to reduce the production composition comprises oligo and is administered to reduce the production composition comprises oligo and is administered to reduce the production composition to increase the degradation of the target mRNA or to creduce the amount of target polypeptide present in the lungs. The culting and/or bundlenmation, allergies and/or surfactant hypoproduction are associated inflammation, allergies and/or surfactant hypoproduction are associated
                                             ö
                                                                                                                                                                                                                                                                                  Human; antisense; bronchoconstriction; allergy; hyposecretion; pain; respiratory tract inflammation; adenosine sensitivity; lung; cancer; surfactant depletion; antiallergic; antiinflammatory; antiasthmatic; analgesic; hypotensive; immunosuppressive; cytostatic; cystic fibrosis; beta-adrenergic agonist; respiratory disease; pulmonary vasoconstriction; respiratory distress syndrome; allergic rhinitis; pulmonary hypertension; emphysema; chronic obstructive pulmonary disease; cancer; bronchitis; pulmonary transplantation rejection; ss; primer.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               S
                                             Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Pharmaceutical composition for treating asthma, has antisense oligonucleotide containing less percentage of adenosine, targeted trucleic acids associated with lung airway or lung dysfunction, and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Aguilar D;
                                             ö
                  Length 20;
                                             2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Pabalan J,
               Score 15.8; DB 1;
Pred. No. 3.3e+02;
0; Mismatches 2;
                                                                                                                                                                                                                                                              AA284245-derived oligonucleotide SEQ ID 9285.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Katz E,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Claim 15; SEQ ID NO 9285; 763pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              i Y, Sandrasagra A, Ka
Tang L, Shahabuddin S;
                                                                         1261 AGAGGAGAGTTGAAGAGAG 1279
                                                                                          ABD30273 standard; DNA; 20 BP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            23-APR-2002; 2002WO-US013143.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      24-APR-2001; 2001US-0286036P.
               0.3%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    (EPIG-) EPIGENESIS PHARM INC
                                                                                                                                                                                                                                      (first entry)
                Query Match
Best Local Similarity 89.5
Marches 17; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  bronchodilating agent
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         WPI; 2003-093058/08.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Li Y,
                                                                                                                                                                                                                                                                                                                                                                                                                                                      WO200285309-A2
                                                                                                                                                                                                                                                                                                                                                                                                                           Homo sapiens.
                                                                                                                                                                                                                                      29-JUL-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   31-OCT-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Miller S,
                                                                                                                                                                                                           ABD30273;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Nyce JW.
                                                                                                                                                   RESULT 472
```

```
This invention describes a novel composition (a) a first active agent, comprising oligonucleotides, effective for alleviating bronchoconstriction, respiratory tract inflammation, allergies and reducing adenosine sensitivity, levels of adenosine (A) or (A) receptors, surfactant depletion or hyposecretion, when administered to a mammal. The oligonucleotides are derived from a gene encoding or regulating expression of a target polypeptide associated with lung airway or lung dysfunction or cancer and can be anti-sense to the corresponding mRNA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Human; antisense; bronchoconstriction; allergy; hyposecretion; pain; respiratory tract inflammation; adenosine sensitivity; lung; cancer; surfactant depletion; antiallergic; antiinflammatory; antiasthmatic; analgesic; hypotensive; immunosuppressive; cytostatic; cytoste fibrosis; besta-adrenergic agonist; respiratory disease; pulmonary vasoconstriction; respiratory distress syndrome; allergic rhinitis; pulmonary hypertension; emphysema; chronic obstructive pulmonary disease; cancer; bronchitis; pulmonary transplantation rejection; ss; primer.
with a disease or condition such as pulmonary vasoconstriction, inflammation, allergies, asthma, impeded respiration, respiratory distress syndrome, pain, cystic fibrosis, allergic rhinitis, pulmonary hypertension, emphysema, chronic obstructive pulmonary disease, pulmonary transplantation rejection, pulmonary infections, bronchitis or cancer. The reduced adenosine content of the anti-sense oligos corresponding to thymidines present in the target RNA serves to prevent the breakdown of the oligonucleotides into products that free adenosine into the system e.g., lung, brain, heart, kindey, etc, tissue environment and thereby, to prevent any unwanted effects due to it
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        to
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Pharmaceutical composition for treating asthma, has antisense oligonucleotide containing less percentage of adenosine, targeted trucleic acids associated with lung airway or lung dysfunction, and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Aguilar D;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ..
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   0.3%; Score 15.8; DB 1; Length 20; 89.5%; Pred. No. 3.3e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Pabalan J,
                                                                                                                                                                                                                                                                                                                                                                                                       Sequence 20 BP; 4 A; 7 C; 4 G; 5 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AA465687-derived oligonucleotide SEQ ID 4742.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Katz E,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Claim 15; SEQ ID NO 4742; 763pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Li Y, Sandrasagra A, Ka
Tang L, Shahabuddin S;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            4280 CTCCTCATAGCGTCCATGG 4298
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               crccrcaracceccarre 19
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     23-APR-2002; 2002WO-US013143.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    24-APR-2001; 2001US-0286036P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  BP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           (EPIG-) EPIGENESIS PHARM INC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ABD25730 standard; DNA; 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            29-JUL-2004 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Query Match
Best Local Similarity 89.5
Matches 17; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              bronchodilating agent.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   WPI; 2003-093058/08.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Li Y,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       WO200285309-A2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      31-OCT-2002.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Nyce JW, I
Miller S,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ABD25730;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      RESULT 473
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ABD25730
```

bronchodilating agent.

```
The invention also describes a kit, that comprises: (a) a delivery device, in separate containers, (b) the oligonucleotides, (c) instructions for adding a carrier and for use of the kit. The composition of the invention has antiallargic, antiinflammatory, antiasthmatic, analgesic, hypotensive, immunosuppressive and cytostatic activity, is a beta-adrenergic agonist. The composition is useful for preventing or treating a respiratory, lung or malignant disease. The administered composition comprises oligo and is administered to reduce the production or availability, or to increase the degradation of the target mRNA or to pulmonary obstruction, and/or bronchocomstriction and/or lung inflammation, allergies and/or surfactant hypoproduction are associated inflammation, allergies and/or surfactant hypoproduction are associated inflammation.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ö
                                                                                                                                                                                                                                                                                                                                                   inflammation, allergies, asthma, impedential paraconstitution, distress syndrome, pain, cystic fibrosis, allergic rhinitis, pulmonary hypertension, emphysema, chronic obstructive pulmonary disease, pulmonary transplantation rejection, pulmonary infections, bronchitis or cancer. The reduced adenosine content of the anti-sense oligos corresponding to thymidines present in the target RNA serves to prevent the breakdown of the oligonucleotides into products that free adenosine into the system
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ung, brain, heart, kidney, etc, tissue environment and thereby, to
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Score 15.8; DB 1; Length 20;
Pred. No. 3.3e+02;
0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sequence 20 BP; 7 A; 2 C; 3 G; 8 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            prevent any unwanted effects due to it
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      0.3%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Query Match
Best Local Similarity 89.5'
The 17; Conservative
```

390 TCTATGAAGAAGACCCTT 408 1 TTTATGAAGAAGACCTTT 19 ઠે 셤

ABD26605 standard; DNA; 20 BP. (first entry) 29-JUL-2004 ABD26605; RESULT 474 ABD26605

IID ABD2

XX XX ABD2

XX Huma

ABD1

ABD2

ABD2

ABD3

AA909635-derived oligonucleotide SEQ ID 5617.

Human; antisense; bronchoconstriction; allergy; hyposecretion; pain; respiratory tract inflammation; adenosine sensitivity; lung; cancer; surfactant depletion; antiallergic; antiinflammatory; antiasthmatic; analgesic; hypotensive; immunosuppressive; cytostatic; cystic fibrosis; beta-adrenergic agonist; respiratory disease; pulmonary vasoconstriction; respiratory distress syndrome; allergic rhinitis; pulmonary hypertension; emphysema; chronic obstructive pulmonary disease; cancer; bronchitis; pulmonary transplantation rejection; ss; primer.

Homo sapiens

WO200285309-A2.

31-OCT-2002.

23-APR-2002; 2002WO-US013143.

24-APR-2001; 2001US-0286036P. (EPIG-) EPIGENESIS PHARM INC

Pabalan J, Aguilar D; Katz B, Sandrasagra A, Ka L, Shahabuddin S; Li Y, Sand Tang L, Nyce JW, Miller S,

WPI; 2003-093058/08.

Pharmaceutical composition for treating asthma, has antisense oligonuclectide containing less percentage of adenosine, targeted to nucleic acids associated with lung airway or lung dysfunction, and

20-MAY-2002; 2002US-0381857P.

(PHAA ) PHARMACIA CORP.

```
This invention describes a novel composition (a) a first active agent, comprising oligonucleotides, effective for alleviating bronchoconstriction, respiratory tract inflammation, allergies and reducing adenosine sensitivity, levels of adenosine (A) or (A) receptors, surfactant depletion or hyposecretion, when administered to a mammal. The oligonucleotides are derived from a gene encoding or regulating expression of a target polypeptide associated with lung alway or lung dysfunction or cancer and can be anti-sense to the corresponding mRNA. The invention also describes a kit, that comprises: (a) a delivery device, in separate containers (b) the oligonucleotides, (c) instructions for adding a carrier and for use of the kit. The composition of the invention has antiallergic, antiinflammatory, antiasthmatic, analgesic, hypotensive, immunosuppressive and cytostatic activity, is beta-adrenergic agonist. The composition is useful for preventing or composition comprises oligo and is administered to reduce the amount of target polypeptide present in the lungs. The composition comprises oligo and is administered to reduce the production or availability, or to increase the degradation of the target mRNA or to pulmonary obstruction, and/or bronchoconstriction and/or surfactant hypoproduction are associated inflammation, allergies and/or surfactant hypoproduction are associated inflammation. Allergies and/or surfactant hypoproduction are associated inflammation.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              inflammation, allergies, asthma, impeded respiration, respiratory distress as syndrome, pain, cystic fibrosis, allergic thinitis, pulmonary hypertension, emphysema, chronic observative pulmonary disease, pulmonary transplantation rejection, pulmonary infections, bronchitis or cancer. The reduced adenosine content of the anti-sense oligos corresponding to thymidines present in the target RNA serves to prevent the breakdown of the oligonucleotides into products that free adenosine into the system
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      lung, brain, heart, kidney, etc, tissue environment and thereby, to
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            antisense oligonucleotide; glucocorticoid receptor; infection; infidammation; tumnour formation; diabetes; obssity; cardiovascular disorder; hyperlipidaemia; Cushing's syndrome; human; ss; phosphorothioate backbone; 2'methoxyethyl; 2'-MOE.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Human glucocorticoid receptor-specific antisense oligonucleotide #1622.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Gape
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1 0.3%; Score 15.8; DB 1; Length 20; Similarity 89.5%; Pred. No. 3.3e+02; 7; Conservative 0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Sequence 20 BP; 16 A; 4 C; 0 G; 0 T; 0 U; 0 Other;
                                            Claim 15; SEQ ID NO 5617; 763pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          prevent any unwanted effects due to it
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   5047 AAAAAAAAAAAAAAAAC 5065
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1 AAACAAAAACAAAAAAC 19
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             20-MAY-2003; 2003WO-US016084.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ADH64788 standard; DNA; 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 WO2003099215-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Query Match
Best Local Simi]
Matches 17; (
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   25-MAR-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   04-DEC-2003.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ADH64788;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            RESULT 475
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ADH64788/
ID ADH6
셤
```

```
US2003232437-A1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           18-DEC-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Synthetic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ADH54718;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Zhang H,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           RESULT 477
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ADH54718/A

IID ADH55

AAC ADH55

AAC ADH55

AAC ADH55

XXX ADH57

XXX ADH57

XXX Human

                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         임
8×333338
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        요
                                                                                                                                                                                                                                                                                                                                                                                                       ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ö
                                                                                                                                                                                                                                                                                                                                                         The invention comprises an antisense oligonucleotides that are targeted to nucleic acids encoding a mammalian glucocorticoid receptor. The antisense oligonucleotides of the invention are useful for preventing or delaying infection, inflammation or tumour formation. The antisense oligonucleotides are also useful for treating diabetes, obesity, cardiovascular disorders, hyperlipidaemia or Cushing's syndrome. The present DNA sequence represents an antisense oligonucleotide that targets the human glucocorticoid receptor gene. NOTE: The present sequence contains 2'-methoxyethyl (2'-MOE) wings and a phosphorothioate backbone.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           New antisense compound targeted to a nucleic acid molecule encoding mammalian glucocorticoid receptor, useful for treating diabetes, obesity, cardiovascular disorder, hyperlipidemia or Cushing's syndrome.
                                                                                                                                              New antisense compound targeted to a nucleic acid molecule encoding mammalian glucocorticoid receptor, useful for treating diabetes, obesity, cardiovascular disorder, hyperlipidemia or Cushing's syndrome.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 The invention comprises an antisense oligonucleotides that are targeted to nucleic acids encoding a mammalian glucocorticoid receptor. The antisense oligonucleotides of the invention are useful for preventing or delaying infection, inflammation or tumour formation. The antisense oligonucleotides are also useful for treating diabetes, obesity,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              antisense oligomucleotide; glucocorticoid receptor; infection; inflammation; tumour formation; diabetes; obesity; cardiovascular disorder; hyperlipidaemia; Cushing's syndrome; human; ss; phosphorothioate backbone; 2'-methoxyethyl; 2'-MOE.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Human glucocorticoid receptor-specific antisense oligonucleotide #1774.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Query Match
0.3%; Score 15.8; DB 1; Length 20;
Best Local Similarity 89.5%; Pred. No. 3.3e+02;
Matches 17; Conservative 0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Sequence 20 BP; 3 A; 10 C; 1 G; 6 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Claim 4; SEQ ID NO 1774; 985pp; English.
                                                                                                                                                                                                                                                                                               Claim 4; SEQ ID NO 1622; 985pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    4203 GTGGGACATGGAGACTGGT 4221
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  19 GAGGGAGATGGAGACTGGT 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ВP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          20-MAY-2002; 2002US-0381857P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 20-MAY-2003; 2003WO-US016084
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ADH64940 standard; DNA; 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Crosby SD, Nalseth AE;
   Crosby SD, Nalseth AE,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               (PHAA ) PHARMACIA CORP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             WPI; 2004-035034/03.
                                                                            WPI; 2004-035034/03
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   WO2003099215-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            25-MAR-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            04-DEC-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ADH64940;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Homo
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     RESULT 47
ADH64940/
```

g

à

```
ö
                                                                                                                                                                                                                                                                                                           ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               The invention relates to a compound targeted to and which specifically hybridises with a nucleic acid molecule encoding VEGF-C, and inhibits the expression of VEGF-C. The compound, composition and methods are useful for treating a disease or condition associated with VEGF-C, such as a cardiovascular disorder e.g. atherosclerosis or diabetic retinopathy or an autoimmune or inflammatory disorder. They are also useful in research and diagnostics for modulating the expression of VEGF-C. The present sequence represents a human VEGF-C antisense oligonucleotide.
cardiovascular disorders, hyperlipidaemia or Cushing's syndrome. The present DNA sequence represents an antisense oligonucleotide that targets the human glucocorticoid receptor gene. NOTE: The present sequence contains 2'-methoxyethyl (2'-MOE) wings and a phosphorothioate backbone.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Gaps
                                                                                                                                                                                                                                                                                                           Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            New compounds, particularly antisense oligonucleotides targeted to a nucleic acid encoding vascular endothelial growth factor-C (VEGF-C), useful for treating atherosclerosis, diabetic retinopathy, or inflammatory disorders.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        human; ss; VEGF-C; cardiovascular disorder; atherosclerosis; diabetic retinopathy; autoimmune disorder; inflammatory disorder; vascular endothelial growth factor; antisense.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ;
0
                                                                                                                                                                                                                                                                                                           ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      0.3%; Score 15.8; DB 1; Length 20;
89.5%; Pred. No. 3.3e+02;
ative 0; Mismatches 2; Indels
                                                                                                                                                                                                                               0.3%; Score 15.8; DB 1; Length 20;
89.5%; Pred. No. 3.3e+02;
tive 0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Human VEGF-C antisense oligonucleotide ISIS 158106
                                                                                                                                                                   Sequence 20 BP; 3 A; 10 C; 2 G; 5 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Sequence 20 BP; 3 A; 4 C; 5 G; 8 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Example 15; SEQ ID NO 19; 83pp; English.
                                                                                                                                                                                                                                                                                                                                                                          4203 GTGGGACATGGAGACTGGT 4221
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              966 GACAGCTGTGGACCAAGCA 984
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                20 gacarcrereadaca 2
                                                                                                                                                                                                                                                                                                                                                                                                                                         N
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    BP
                                                                                                                                                                                                                                                                                                                                                                                                                 17-JUN-2002; 2002US-00173718
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     17-JUN-2002; 2002US-00173718
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ADH54718 standard; DNA; 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     25-MAR-2004 (first entry)
                                                                                                                                                                                                                                         Query Match 0.3
Best Local Similarity 89.5
Matches 17; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   17; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       (ISIS-) ISIS PHARM INC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            WPI; 2004-061284/06.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Dobie KW;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Query Match
Best Local Similarity
```

```
Homo sapiens
                                                                                                                                                                                                                                                                    08-JAN-2004.
                                            Synthetic.
                                                                                                                                                                                                                                                                                                                                                             Kane CD;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Matches
셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ö
                                                                                                                                                                                                                                                                                                                                                                                                                                            inhibits the
                                                                                                                                                                                                                                                                                                                                                                                                                            The invention relates to a compound targeted to and which specifically hybridises with a nucleic acid molecule encoding VEGF-C, and inhibits the expression of VEGF-C. The compound, composition and methods are useful for treating a disease or condition associated with VEGF-C, such as a cardiovascular disorder e.g. atherosclerosis or diabetic retinopathy or an autoimmune or inflammatory disorder. They are also useful in research and diagnostics for modulating the expression of VEGF-C. The present sequence represents a human VEGF-C target region.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 phosphorochioate; 2' MOE; breast cancer; dyslipidaemia; atherosclerosis; low HDL; high density lipoprotein; high LDL; hypercholesterolaemia; gall stone; triglyceridaemia; obesity; hepatitis; hepatocellular carcinoma; aromatase; cytostatic; antilipaemic;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Antisense DNA oligo used to modulate human LRH1 expression SeqID 1640.
                                                                                                                                                                                                                                                                                                                                                  New compounds, particularly antisense oligonucleotides targeted to a nucleic acid encoding vascular endothelial growth factor-C (VEGF-C), useful for treating atherosclerosis, diabetic retinopathy, or inflammatory disorders.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Gaps
                                                                                                                  human; 88; VEGF-C; cardiovascular disorder; atherosclerosis; diabetic retinopathy; autoimmune disorder; inflammatory disorder; vascular endothelial growth factor.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               .
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         human; 88; liver related homologue-1; LRH1; NR5A2; antisense;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Query Match
0.3%; Score 15.8; DB 1; Length 20;
Best Local Similarity 89.5%; Pred. No. 3.3e+02;
Matches 17; Conservative 0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Seguence 20 BP; 8 A; 5 C; 4 G; 3 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                         Example 15; SEQ ID NO 89; 83pp; English.
                                                                                                  Human VEGF-C target region ISIS 73607.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     966 GACAGCTGTGGACCAAGCA 984
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1 GACATCTGTGGACCAAACA 19
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ADJ17090 standard; DNA; 20 BP.
                               ADH54788 standard; DNA; 20 BP.
                                                                                                                                                                                                                                    17-JUN-2002; 2002US-00173718
                                                                                                                                                                                                                                                           17-JUN-2002; 2002US-00173718
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              20-MAY-2004 (first entry)
                                                                           (first entry)
                                                                                                                                                                                                                                                                                 (ISIS-) ISIS PHARM INC.
                                                                                                                                                                                                                                                                                                                             WPI; 2004-061284/06.
                                                                                                                                                                                                                                                                                                       Dobie KW;
                                                                                                                                                                                         US2003232437-A1
                                                                                                                                                                    Homo sapiens.
                                                                           25-MAR-2004
                                                                                                                                                                                                               18-DEC-2003
                                                                                                                                                                                                                                                                                                       Zhang H,
                                                     ADH54788;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ADJ17090,
          RESULT 478
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           RESULT 475
ADJ17090/c
                      ADH54788
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 셤
                                            ò
```

```
This invention relates to novel antisense compounds useful for modulating the expression of liver related homologue-1 (LRH1) and splice variants the expression of liver refers to compositions 8-30 nucleobases in length that target a portion of an active site on the nucleic acid molecule encoding LRH1 (also known as NESA2). LRH1 is a monomeric orphan molecule encoding LRH1 (also known as NESA2). LRH1 is a monomeric orphan conclear receptor protein that functions as a tissue specific ranscription factor. The present invention describes antisense oligonucleotides that comprise at least one modified internucleoside oligonucleotides that comprise at least one modified internucleoside linkage, a phosphorothioate linkage; at least one modified sugar moiety, a 2-0-methoxysthyl (2' MOE) and at least one modified sugar moiety. The artisense compounds are useful for treating or disgnosing a disease associated with LRH1, such as breast cancer, disgnosing a theroscalerosis, low HDL (high density lipoprotein), hyperholesterolaemia, gall stones cripil (low density lipoprotein), hyperholesterolaemia, gall stones cripinal as hepatocellular carcinoma or a condition associated with aromatase activity. Accordingly, these compositions exhibit cytostatic, antilipaemic, antiarteriscleotic, anorectic, hepaticic, antilipaemic, antiarteriscleotic, anorectic, hepaticic, all activities. This
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    New antisense oligonucleotides targeted to a nucleic acid encoding liver related homologue-1 (LRH1), useful for treating breast cancer, dyslipidemia, atherosclerosis, hypercholesterolemia, or hepatitis.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              /mod_base= OTHER /nethoxyethyl (2' MOE) nucleotides. All cytidine nucleobases are 5-methylcytidine."
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    /note= "OTHER= 2' methoxyethyl (2' MOE) nucleotides. All cytidine nucleobases are 5-methylcytidine."
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      oligonuclectide sequence is an antisense DNA oligo used to modulate the expression of the human LRH1 protein of the invention.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Gape
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Length 20;
antiarteriosclerotic; anorectic; hepatotropic; litholytic; antiinflammatory; virucidal.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      2; Indels
                                                                                                                                                                                                                                                                                                                                                                   /label= OTHER= phosphorothioate backbone
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Sequence 20 BP; 3 A; 1 C; 3 G; 13 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Score 15.8; DB 1;
Pred. No. 3.3e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Example 15; SEQ ID NO 1640; 909pp; English
                                                                                                                                                                                                                      Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  3303 AACTGTCCAAAATAAAAA 3321
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  /mod_base= OTHER
                                                                                                                                                                                                                                                                                                                                    base= OTHER
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       20 AACAGTCCAAAATAATAAA 2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    01-JUL-2003; 2003WO-US020865.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                01-JUL-2002; 2002US-0392813P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 0.3%;
                                                                                                                                                                                                                                                                                                  Д
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          17; Conservative
                                                                                                                                                                                                                                                                                                  /*tag≃
/mod_ba
                                                                                                                                                                                                                                                                                                                                                                                                                                            '*tag≃
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           *tag=
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     PHAA ) PHARMACIA CORP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       WPI; 2004-083058/08
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       WO2004003201-A2.
                                                                                                                                                                                                                      Key
modified_base
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 modified base
                                                                                                                                                                                                                                                                                                                                                                                                         modified base
```

ô

```
셤
                                                                                                                                                                       ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              This invention relates to novel antisense compounds useful for modulating the expression of liver related homologue-1 (LRH1) and splice variants thereof. Specifically, it refers to compositions 8-30 nucleobases in length that target a portion of an active site on the nucleic acid molecule encoding LRH1 (also known as NRSA2). LRH1 is a monomeric orphan nuclear receptor protein that functions as a tissue specific transcription factor. The present invention describes antisense oligonucleotides that comprise at least one modified internucleoside linkage, a phosphorothicate linkage; at least one modified internucleoside as 2'-0-methoxyethyl (2' MOE) and at least one modified nucleobase, a 2'-0-methoxyethyl (2' MOE) and at least one widtified nucleobase, a 5-diagnosing a disease associated with LRH1, such as breast cancer, dyslipidaemia, atherosclerosis, low HDL (high density lipoprotein), high LDL (low density lipoprotein), hypercholesterolaemia, gall stones,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         New antisense oligonucleotides targeted to a nucleic acid encoding liver related homologue-1 (LRH1), useful for treating breast cancer, dyslipidemia, atherosclerosis, hypercholesterolemia, or hepatitis.
                                                                                                                                                         phosphorothicate, 2 MOE, breast cancer, dyslipidaemia, atherosclerosis, low HDL, high density lipoprotein, high LDL, hypercholesterolaemia, gall stone, triglyceridaemia, obesity, hepatitis;
                                                                                                                                                                                                                                                                                                                                                                                /note= "OTHER= 2' methoxyethyl (2' MOE) nucleotides. All cytidine nucleobases are 5-methylcytidine."
                                                                                                                                                                                                                                                                                                                                                                                                                                             /note= "OTHER= 2' methoxyethyl (2' MOE) nucleotides. All cytidine nucleobases are 5-methylcytidine."
                                                                                                                       Antisense DNA oligo used to modulate human LRH1 expression SeqID 692.
                                                                                                                                                                                             hepatocellular carcinoma; aromatase; cytostatic; antilipaemic; antiarteriosclerotic; anorectic; hepatotropic; litholytic; antiinflammatory; virucidal.
                                                                                                                                                ss; liver related homologue-1; LRH1; NR5A2; antisense;
                                                                                                                                                                                                                                                                                                                   /mod_base= OTHER
/label= OTHER= phosphorothioate backbone
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Example 15; SEQ ID NO 692; 909pp; English.
                                                                                                                                                                                                                                                                                    Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                       /mod_base= OTHER
/note== "OTHER= 2'
                                                                                                                                                                                                                                                                                                                                                                                                                                   /mod_base= OTHER
                                               ADJ16142 standard; DNA; 20 BP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  01-JUL-2003; 2003WO-US020865.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           01-JUL-2002; 2002US-0392813P.
                                                                                                                                                                                                                                                                                                                                                  /*tag= a
                                                                                               (first entry)
                                                                                                                                                                                                                                                                                                          Д
                                                                                                                                                                                                                                                                                                                                                                                                                         υ
                                                                                                                                                                                                                                                                                                         *tag=
                                                                                                                                                                                                                                                                                                                                                                                                             .50
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  (PHAA ) PHARMACIA CORP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 WPI; 2004-083058/08.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    WO2004003201-A2
                                                                                                                                                                                                                                                                                                                                               modified base
                                                                                                                                                                                                                                                                                                                                                                                                           modified base
                                                                                                                                                                                                                                                                                             modified_base
                                                                                                                                                                                                                                               Homo sapiens
                                                                                                20-MAY-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           08-JAN-2004
                                                                                                                                                                                                                                                          Synthetic.
                                                                        ADJ16142;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Kane CD;
```

```
ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            expression, for diagnosing, preventing or treating e.g. dyslipidemia, low high density lipoprotein or cardiovascular disorders.
triglyceridaemia, obesity, hepatitis B virus-mediated acute or chronic hepatitis, as well as hepatocellular carcinoma or a condition associated with aromatase activity. Accordingly, these compositions exhibit cytostatic, antilipaemic, antiarteriosclerotic, anorectic, hepatotropic, litholytic, antiliflammatory and virucidal activities. This oligonucleotide sequence is an antisense DNA oligo used to modulate the expression of the human LRHI protein of the invention.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   /note= "This oligonuclectide has a phosphorothioate backbone and 2-'methyoxyethyl (2'-MOE) wings at the 5' and 3' ends, which are 4 nucleotides in length. Also all
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Antilipaemic, Cardiovascular, Analgesic, Antianginal, Antisense therapy, Human, Endothelial Lipase, dyslipidaemia, high density lipoprotein, HDL, cardiovascular disorder, metabolic syndrome X; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 The present invention relates to antisense oligonucleotides (ADJ21603-ADJ25510) targeted to human Endothelial Lipase (EL) coding sequence (ADJ25511), where the antisense oligonucleotide specifically hybridises with and inhibits the expression of EL. The antisense oligonucleotides are useful for modulating the expression of endothelial lipase in cells or tissues to tract diseases associated with EL expression, such as dyslipidaemia, low high density lipoprotein (HDL), cardiovascular disorder or metabolic syndrome X. In addition, the oligonucleotides are
                                                                                                                                                                                                                                                                                                                                                                                                                       Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Human endothelial lipase antisense oligonucleotide, SEQ ID 1535.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       New antisense oligonucleotide for modulating endothelial lipase
                                                                                                                                                                                                                                                                                                                                                                                                                       ö
                                                                                                                                                                                                                                                                                                                                                   Length 20;
                                                                                                                                                                                                                                                                                                                                                                                                                       2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              and 3' ends, which are 4 nucleotides in cytidine residues are 5-methylcytidines"
                                                                                                                                                                                                                                                                            Sequence 20 BP; 3 A; 2 C; 3 G; 12 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                   Score 15.8; DB 1;
Pred. No. 3.3e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                       0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Claim 3; SEQ ID NO 1535; 1007pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           3303 AACTGTCCAAAATAAAAA 3321
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         /mod_base= OTHER
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            19 AACAGTCCAAAATAAA 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        BP.
                                                                                                                                                                                                                                                                                                                                                   0.3%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      18-JUL-2003; 2003WO-US022410.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          19-JUL-2002; 2002US-0397106P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ADJ23137 standard; DNA; 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      /*tag= a
                                                                                                                                                                                                                                                                                                                                                                                                                       17; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           (PHAA ) PHARMACIA CORP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   WPI; 2004-132912/13.
                                                                                                                                                                                                                                                                                                                                                   Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     WO2004009541-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Key
modified_base
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        20-MAY-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Homo sapiens,
Synthetic,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      29-JAN-2004.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ADJ23137;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Bhat BG;
                                                                                                                                                                                                                                                                                                                                                                                                                           Matches
```

Gapa

ö

Indele

..

0; Mismatches

17; Conservative

```
Matches
            8
                                               셤
                                                                                                                       셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ò
                                                                       ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     New antisense oligonucleotide for modulating endothelial lipase expression, for diagnosing, preventing or treating e.g. dyslipidemia, low high density lipoprotein or cardiovascular disorders.
                                                                                                                                                                                                                                                                                                                                                                                                      /mod_base= OTHER //mod_base= OTHER //mod_base= This oligonucleotide has a phosphorothioate backbone and 2-'methyoxyethyl (2'-MOE) wings at the 5' and 3' ends, which are 4 nucleotides in length. Also all cytidine residues are 5-methylcytidines"
                                                                                                                                                                                                                                                                               Antilipaemic, Cardiovascular, Analgesic, Antianginal, Antisense therapy,
Human, Endothelial Lipase, dyslipidaemia, high density lipoprotein, HDL,
cardiovascular disorder, metabolic syndrome X; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            The present invention relates to antisense oligonucleotides (ADJ21603-ADJ25510) targeted to human Endothelial Lipase (EL) coding sequence (ADJ25517), where the antisense oligonucleotide specifically hybridises with and inhibits the expression of EL. The antisense oligonucleotides are useful for modulating the expression of endothelial lipase in cells or tissues to treat diseases associated with EL expression, such as dyslipidaemia, low high density lipoprotein (HDL), cardiovascular disorder or metabolic syndrome X. In addition, the oligonucleotides are used for diagnostics, prophylaxis, or as research reagents or kits.
                                                                       Gaps
 used for diagnostics, prophylaxis, or as research reagents or kits.
                                                                                                                                                                                                                                                         Human endothelial lipase antisense oligonucleotide, SEQ ID 1051.
                                                                       ö
                                             0.3%; Score 15.8; DB 1; Length 20;
89.5%; Pred. No. 3.3e+02;
tive 0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             0.3%; Score 15.8; DB 1; Length 20;
89.5%; Pred. No. 3.3e+02;
                      Sequence 20 BP; 6 A; 4 C; 5 G; 5 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Sequence 20 BP; 7 A; 5 C; 4 G; 4 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Claim 3; SEQ ID NO 1051; 1007pp; English.
                                                                                                                                                                                                                                                                                                                                                                   Location/Qualifiers
                                                                                               984 ACACAAATCTGGAGTTCGT 1002
                                                                                                            1 ACACAAATCTGGACTTGGT 19
                                                                                                                                                                                 ADJ22653 standard; DNA; 20 BP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                18-JUL-2003; 2003WO-US022410
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        19-JUL-2002; 2002US-0397106P
                                                                                                                                                                                                                                                                                                                                                                                              ಹ
                                                                                                                                                                                                                                20-MAY-2004 (first entry)
                                           Query Match 0.3
Best Local Similarity 89.5
Matches 17, Conservative
                                                                                                                                                                                                                                                                                                                                                                                             /*tag=
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               (PHAA ) PHARMACIA CORP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                WPI; 2004-132912/13.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 WO2004009541-A2
                                                                                                                                                                                                                                                                                                                                                                                 modified base
                                                                                                                                                                                                                                                                                                                                  Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       29-JAN-2004.
                                                                                                                                                                                                                                                                                                                                            Synthetic.
                                                                                                                                                                                                        ADJ22653;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Bhat BG;
                                                                                                                                                         RESULT 482
ADJ22653
                                                                                                                  셤
                                                                                                                                                                                  SXS
                                                                                               8
```

```
ô
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      The present invention relates to an antisense compound targeted to a nucleic acid molecule encoding Navi.3, where the antisense compound specifically hybridizes with and inhibits the expression of Navi.3. The compound and composition are useful for treating a disease or condition associated with Navi.3, e.g. pain including but not limited to neuropathic pain, post-herpetic neuralgia, chronic pain, lower back pain, diabetic neuropathy, trigeminal neuropathy, arthritic pain, acute pain, pain from burns, migraine headache, cluster headache, mild-to-moderate but not limited to neonatal or infantile epilepsy, or atexia. The present sequence represents a chimeric phosphorothioate oligonucleotide with 2. MOE wings and a deoxy gap. Used during the antisense inhibition of human Navi.3 expression, the oligonucleotides are designed to target
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    New antisense compound targeted to a nucleic acid molecule encoding Nav1.3, useful for useful for treating a disease or condition associated with Nav1.3, e.g. pain, seizure disorder such as childhood seizure disorder, or ataxia.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Navl.3; Analgesic; Nootropic; Neuroprotective; post-herpetic neuralgia;
diabetic neuropathy; arthritic pain; migraine headache;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Gарв
                                                                                                                                                                                                                                                                                                                                                                                                                                Chimeric phosphorothioate oligonucleotide to target Navl.3 #8857.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Query Match 0.3%; Score 15.8; DB 1; Length 20; Best Local Similarity 89.5%; Pred. No. 3.3e+02; Matches 17; Conservative 0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Sequence 20 BP; 17 A; 3 C; 0 G; 0 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Claim 4; SEQ ID NO 8857; 417pp; English.
983 CACACAAATCTGGAGTTCG 1001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        5025 AAAAAAAAAAAAAAAA 5043
                                                              2 cacacaarcregacrieg 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       infantile epilepsy; ataxia; ss
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 BP.
                                                                                                                                                                                                                              BP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       14-AUG-2002; 2002US-0403416P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        14-AUG-2003; 2003WO-US025465
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       2 AAAAACAAAAACAAAAA
                                                                                                                                                                                                                              ADK81523 standard; DNA; 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ADK80970 standard; DNA; 20
                                                                                                                                                                                                                                                                                                                                                              20-MAY-2004 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         (PHAA ) PHARMACIA CORP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            WPI; 2004-203785/19.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        WO2004016754-A2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      26-FEB-2004.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Roberds SL;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Synthetic.
                                                                                                                                                                                                                                                                                                   ADK81523;
                                                                                                                                                                   RESULT 483
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               RESULT 484
                                                                                                                                                                                           ADK81523
ID ADKE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ADK80970
ID ADK8
```

```
disorder.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ADL59601;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       RESULT 486
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ADL59601/
      à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    셤
                                                                                                                                                                                                                                                                                                                                                                                  The present invention relates to an antisense compound targeted to a suucleic acid molecule encoding Nav1.3, where the antisense compound specifically hybridizes with and inhibits the expression of Nav1.3. The compound and composition are useful for treating a disease or condition neuropathic pain, post-herpetic neuralgia, chronic pain, lower back pain, diabetic neuropathy, trigenman neuropathy, arthritic pain, acute pain, pain from burns, migraine headache, cluster headache, mild-to-moderate but not limited to neonatal or infantile epilepsy, or ataxia. The presente a chimeric phosphorothioate oligonucleotide with human Nav1.3 expression, the oligonucleotide with human Nav1.3 expression, the oligonucleotides are designed to target
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            .;
0
                                                                                                                                                                                                                                                                                                        New antisense compound targeted to a nucleic acid molecule encoding Nav1.3, useful for useful for treating a disease or condition associated with Nav1.3, e.g. pain, seizure disorder such as childhood seizure disorder, or ataxia.
                                                                           Nav1.3; Analgesic; Nootropic; Neuroprotective; post-herpetic neuralgia; diabetic neuropathy; arthritic pain; migraine headache; infantile epilepsy; ataxia; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              cytostatic, antidiabetic; immunomodulator; cardiant; neuroprotective;
gene therapy; endothelial specific molecule-1; ESM-1;
ESM-1 related disorder; diabetes; cancer; ischaemia; reperfusion injury;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Gaps
                                                    Chimeric phosphorothioate oligonucleotide to target Nav1.3 #8304.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            .
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                0.3%; Score 15.8; DB 1; Length 20; 89.5%; Pred. No. 3.3e+02; ive 0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Sequence 20 BP; 16 A; 4 C; 0 G; 0 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Human ESM-1 antisense oligonucleotide seqid 1964.
                                                                                                                                                                                                                                                                                                                                                              Claim 4; SEQ ID NO 8304; 417pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           5047 AAAAAAAAAAAAAAA 5065
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1 AAAAACAAAAACAAAAAC 19
                                                                                                                                                                                                                  14-AUG-2002; 2002US-0403416P.
                                                                                                                                                                                          14-AUG-2003; 2003WO-US025465
                                 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ADL59715 standard; DNA; 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Query Match 0.3
Best Local Similarity 89.5
Matches 17; Conservative
                                                                                                                                                                                                                                      (PHAA ) PHARMACIA CORP
                                                                                                                                                                                                                                                                                    WPI; 2004-203785/19.
                                                                                                                                             WO2004016754-A2.
                                 20-MAY-2004
                                                                                                                                                                   26-FEB-2004
                                                                                                                                                                                                                                                             Roberds SL;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    03-JUN-2004
                                                                                                                         Synthetic.
          ADK80970;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ADL59715;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    RESULT 485
g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ð
```

```
ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 The invention describes a new antisense compound, having a sequence comprising 8-30 bp targeted to a nucleic acid encoding endothelial specific molecule-1 (ESM-1), that specifically hybridises with the nucleic acid ESM-1 and inhibits its expression. Also described are: a composition; inhibiting the expression of ESM-1 in cells or tissues; and treation; inhibiting the expression of ESM-1 in cells or tissues; and the compound is useful for preparing a composition for treating diabetes, cancer, ischaemia or reperfusion injury, or angiogenic, immunological, cardiovascular or neurological disorder. This sequence represents an antisense oligonuclectie that can be used to modulate expression of endothelial specific molecule-1 (ESM-1).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         New antisense compound, having a sequence targeted to a nucleic acid encoding endothelial specific molecule-1 (ESM-1), useful for preparing a composition for treating e.g., diabetes, cancer or cardiovascular
                                                                                                                                                                             /*tag= b
/mod base= OTHER
/note= "OTHER= phosphorothioate backbone. All cytidine
residues are 5-methylcytidines"
angiogenic disorder; immunological disorder; cardiovascular disorder; neurological disorder; antisense technology; ss.
                                                                                                                                                                                                                                                                                                                                        /mod_base= OTHER
/note= "OTHER= 2'-methoxyethyl (2'-MOE) nucleotides"
16. .20
                                                                                                                                                                                                                                                                                                                                                                                                                     /*tag= c
/mod_base= OTHER
/note= "OTHER= 2'-methoxyethyl (2'-MOB) nucleotides"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ô
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Score 15.8; DB 1; Length 20;
Pred. No. 3.3e+02;
0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Sequence 20 BP; 8 A; 4 C; 0 G; 8 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Human ESM-1 antisense oligonucleotide seqid 1850.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Claim 3; SEQ ID NO 1964; 555pp; English.
                                                                                                                              Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 4353 TATGAAAATAAGGTTTTGG 4371
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          19 TATGAAATAAGTTTTTAG 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           19-AUG-2003; 2003WO-US025833
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                19-AUG-2002; 2002US-0404495P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ВЪ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             0.3%;
                                                                                                                                                                                                                                                                                              1. ..
/*tag= a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              601/c
ADL59601 standard; DNA; 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Matches 17; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 (PHAA ) PHARMACIA CORP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Griggs
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          WPI; 2004-248358/23.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     WO2004021978-A2
                                                                                                                              Key
modified_base
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Weinstein EJ,
                                                                                                                                                                                                                                                                                      nodified base
                                                                                                                                                                                                                                                                                                                                                                                         modified base
                                                                               Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             18-MAR-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       03~JUN-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 EXHXHXB
```

cytostatic; antidiabetic; immunomodulator; cardiant; neuroprotective; gene therapy; endothelial specific molecule-1; ESM-1; ESM-1; ESM-1 related disorder; diabetes; cancer; lschaemia; reperfusion injury; angiogenic disorder; immunological disorder; cardiovascular disorder; neurological disorder; estimonalogical disorder; estimonalogical disorder; neurological disorder;

Human ESM-1 antisense oligonucleotide segid 1625.

(first entry)

03-JUN-2004

/mod\_base= OTHER /note= "OTHER= phosphorothioate backbone. All cytidine residues are 5-methylcytidines"

Location/Qualifiers

Key modified\_base

Homo sapiens

Д

\*tag=

"OTHER= 2'-methoxyethyl (2'-MOE) nucleotides"

/mod\_base= OTHER /note= "OTHER= 2' 16. .20

/\*tag= c

modified base

1. .5 /\*tag= a

modified base

/mod\_base= OTHER /note= "OTHBR= 2'-methoxyethyl (2'-MOB) nucleotides"

19-AUG-2003; 2003WO-US025833 19-AUG-2002; 2002US-0404495P

WO2004021978-A2

18-MAR-2004.

Griggs DW;

Weinstein EJ,

WPI; 2004-248358/23.

(PHAA ) PHARMACIA CORP.

```
The invention describes a new antisense compound, having a sequence comprising 8-30 bp targeted to a nucleic acid encoding endothelial specific molecule-1 (ESM-1), that specifically hybridises with the nucleic acid ESM-1 and inhibits its expression. Also described are: a composition; inhibiting the expression of ESM-1 in cells or tissues; and treating an enimal having a disease or condition associated with ESM-1. The compound is useful for preparing a composition for treating diabetes, cancer, ischaemia or reperfusion injury, or angiogenic, immunological, cardiovascular or neurological diabetes, antisense oligonucleotide that can be used to modulate expression of endothelial specific molecule-1 (ESM-1).
                cytostatic; antidiabetic; immunomodulator; cardiant; neuroprotective; gene therapy; endothelial specific molecule-1; ESM-1; ESM-1; ESM-1 related disorder; diabetes; cancer; ischaemia; reperfusion injury; angiogenic disorder; immunological disorder; cardiovascular disorder; neurological disorder; selection selections.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        New antisense compound, having a sequence targeted to a nucleic acid encoding endothelial specific molecule-1 (ESM-1), useful for preparing a composition for treating e.g., diabetes, cancer or cardiovascular
                                                                                                                                                                                                                    /note= "OTHER= phosphorothioate backbone. All cytidine residues are 5-methylcytidines"
                                                                                                                                                                                                                                                                                          /mod_base= OTHER
/note= "OTHER= 2'-methoxyethyl (2'-MOE) nucleotides"
                                                                                                                                                                                                                                                                                                                                                              /mod_base= OTHER
/note= "OTHER= 2'-methoxyethyl (2'-MOE) nucleotides"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Sequence 20 BP; 7 A; 5 C; 0 G; 8 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Claim 3; SEQ ID NO 1850; 555pp; English.
                                                                                                                                                      Location/Qualifiers
                                                                                                                                                                                                        /mod base= OTHER
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      19-AUG-2002; 2002US-0404495P
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  19-AUG-2003; 2003WO-US025833
                                                                                                                                                                                                                                                                            /*tag= a
                                                                                                                                                                                                                                                                                                                                                υ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Weinstein EJ, Griggs DW;
                                                                                                                                                                                                                                                                                                                          16. .20
                                                                                                                                                                                                                                                                                                                                                /*tag=
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    (PHAA ) PHARMACIA CORP
                                                                                                                                                                                                                                                                                            pom/
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        WPI; 2004-248358/23.
                                                                                                                                                                                                                                                                                                                                                                                                                WO2004021978-A2
                                                                                                                                                      Key
modified_base
                                                                                                                                                                                                                                                        modified_base
                                                                                                                                                                                                                                                                                                                            modified base
                                                                                                                     Ното варіеля
                                                                                                                                                                                                                                                                                                                                                                                                                                                18-MAR-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            disorder.
```

```
ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      comprising 8-30 bp targeted to a nucleic acid encoding endothelial specific molecule-1 (ESM-1), that specifically hybridiess with the nucleic acid ESM-1 and inhibits its expression. Also described are: a composition; inhibiting the expression of ESM-1 in cells or tissues; and treating an animal having a disease or condition associated with ESM-1. The compound is useful for preparing a composition for treating diabetee cancer, ischaemia or reperfusion injury, or angiogenic, immunological, candiovascular or neurological disorder. This sequence represents an antisense oligonucleotide that can be used to modulate expression of
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Gapa
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            The invention describes a new antisense compound, having a sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         0.3%; Score 15.8; DB 1; Length 20;
19.5%; Pred. No. 3.3e+02;
ve 0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Seguence 20 BP; 8 A; 4 C; 0 G; 8 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               endothelial specific molecule-1 (ESM-1).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Claim 3; SEQ ID NO 1625; 555pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         4351 GATATGAAATAAGGTTTT 4369
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         GGTATGAAATAAGTTTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Local Similarity 89.5%;
nes 17; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Best Loca
Matches
δ
```

ö

Gaps

ö

Indels

0.3%; Score 15.8; DB 1; Length 20; 89.5%; Pred. No. 3.3e+02;

0; Mismatches

4355 TGAAATAAGGTTTTGGGA 4373

ઠે

Query Match 0.3 Best Local Similarity 89.5 Matches 17; Conservative

20

ADL59376 standard; DNA; 20 BP

RESULT 487
ADLS9376/c
ID ADLS937
XX
AC ADLS937

ADL59376

New antisense compound, having a sequence targeted to a nucleic acid encoding endothelial specific molecule-1 (ESM-1), useful for preparing a composition for treating e.g., diabetes, cancer or cardiovascular

RESULT 488

19 AGGTATGAAAATAAGTTTT 1

```
셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ð
유
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               The invention describes a new antisense compound, having a sequence comprising 8-30 bp targeted to a nucleic acid encoding endothelial specific molecule-1 (ESM-1), that specifically hybridises with the nucleic acid ESM-1 and inhibits its expression. Also described are: a composition; inhibiting the expression of ESM-1 in cells or tissues; and treating an animal having a disease or condition associated with ESM-1. The compound is useful for preparing a composition for treating diabetes, cancer, ischaemia or reperfusion injury, or anglogenic, immunological, cardiovascular or neurological disorder. This sequence represents an antisense oligonucleotide that can be used to modulate expression of
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 New antisense compound, having a sequence targeted to a nucleic acid encoding endothelial specific molecule-1 (ESM-1), useful for preparing a composition for treating e.g., diabetes, cancer or cardiovascular
                                                                                                                                                                                                          cytostatic; antidiabetic; immunomodulator; cardiant; neuroprotective; gene therapy; endothelial specific molecule-1; ESM-1; ESM-1shalated disorder; diabetes; cancer; ischaemia; reperfusion injury; angiogenic disorder; immunological disorder; cardiovascular disorder; neurological disorder; se.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           /mod_base= OTHER
/note= "OTHER= phosphorothioate backbone. All cytidine
residues are 5-methylcytidines"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 /mod_base= OTHER
/note= "OTHER= 2'-methoxyethyl (2'-MOE) nucleotides"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         "OTHER= 2'-methoxyethyl (2'-MOE) nucleotides"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Query Match 0.3%; Score 15.8; DB 1; Length 20; Best Local Similarity 89.5%; Pred. No. 3.3e+02; Matches 17; Conservative 0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Sequence 20 BP; 7 A; 4 C; 0 G; 9 T; 0 U; 0 Other;
                                                                                                                                                                    Human ESM-1 antisense oligonucleotide seqid 1507.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Claim 3; SEQ ID NO 1507; 555pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            endothelial specific molecule-1 (ESM-1)
                                                                                                                                                                                                                                                                                                                                                                                                            Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     /mod_base= OTHER
                             ADL59258 standard; DNA; 20 BP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                19-AUG-2002; 2002US-0404495P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   19-AUG-2003; 2003WO-US025833
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             /*tag= c
/mod base=
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 *tag= a
                                                                                                                                                                                                                                                                                                                                                                                                                                                            Д
                                                                                                                          (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Weinstein EJ, Griggs DW;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    .20
                                                                                                                                                                                                                                                                                                                                                                                                                                        . .20
*tag=
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             (PHAA ) PHARMACIA CORP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                /note=
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            WPI; 2004-248358/23.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            WO2004021978-A2
                                                                                                                                                                                                                                                                                                                                                                                                                    Key
modified base
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             modified base
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    modified_base
                                                                                                                                                                                                                                                                                                                                                                       Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      18-MAR-2004
                                                                                                                            03-JUN-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      disorder.
                                                                               ADL59258;
    ADLS9289/C
XX
ADLS92
XX
AC
ADLS92
XX
ADLS92
ADLS92
XX
ADLS92
A
```

```
The invention relates to the use of at least one osmolyte to heat stabilize at least one enzyme that is used in an in-vitro bioluminometric assay during the enzymatic reaction. The osmolyte is useful to heat stabilize at least one enzyme that is used in an in-vitro bioluminometric assay during the enzymatic reaction. The use of osmolytes are increases the speed and quality of DNA sequencing using pyrosequencing (RTM) technology. This sequence represents the resultant DNA sequence obtained using the method of the invention for Pyrosequencing (RTM).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Use of at least one osmolyte to heat stabilize at least one enzyme, e.g. luciferase or apyrase, which is used in an in-vitro bioluminometric assay during the enzymatic reaction.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Farnesoid X receptor gene expression antisense inhibitory oligo #877.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ss; antidiabetic; immunosuppressive; cardiovascular; antilipemic; antiarteriosclerotic; heparotropic; litholytic; anorectic; neuroprotective; vasotropic; antisense; gene therapy; Farnesoid X receptor; diabetes; immunological disorder;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ;
0
                                                                                                                                                        Osmolyte-stabilised bioliuminometric assay resultant sequence.
                                                                                                                                                                                                         stability; in-vitro bioluminometric assay;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       0.3%; Score 15.8; DB 1; Length 20;
89.5%; Pred. No. 3.3e+02;
ative 0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Sequence 20 BP; 5 A; 5 C; 5 G; 5 T; 0 U; 0 Other;
                                                                                                                                                                                                                                      enzymatic reaction; Pyrosequencing
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               4770 GACTGACTGACTAAATGAC 4788
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Disclosure, Fig 5, 49pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          BP.
                  BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                GACTGACTGACTGACTGAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    21-OCT-2002; 2002SE-00003089.
21-OCT-2002; 2002US-0319635P.
                                                                                                                                                                                                                                                                                                                                                                                                                                      21-OCT-2003; 2003WO-SE001627.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ADO53504 standard; DNA; 20
                  ADN35886 standard; DNA; 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         15-JUL-2004 (first entry)
                                                                                                                 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     17; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            WPI; 2004-348470/32.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Query Match
Best Local Similarity
                                                                                                                                                                                                               ss; osmolyte; heat
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               (BIOT-) BIOTAGE AB
                                                                                                                                                                                                                                                                                                                                           WO2004035818-A1.
                                                                                                                    15-JUL-2004
                                                                                                                                                                                                                                                                                                                                                                                          29-APR-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ADO53504;
                                                                                                                                                                                                                                                                                          Synthetic.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   20
                                                                     ADN35886;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Nyren P;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              RESULT 490
ADO53504/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Matches
ADN35886/
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 MAKAKAKAKA
MAKAKAKA
MAKAKA
MAKA
```

. 0

ö

Gaps

; 0

```
Key
modified_base
     Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    modified base
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Homo sapiens
                                                      15-APR-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  invention.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ADN01338;
                                                                                                                                                      Kane CD;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   RESULT 492
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                4DN01338
   ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           셤
                                                                                                                                                                                                                                                                                                                                                         The invention relates to an antisense compound 8-30 nucleobases in length targeted to a nucleic acid molecule encoding Farnesoid X receptor (FXR), where the antisense compound specifically hybridizes with and inhibits the expression of FXR. The composition and methods are useful for inhibiting the expression of FXR (Farnesoid X receptor) in cells or tissues, or for treating diseases or conditions associated with FXR, such as diabetes, immunological disorders, canditions associated with FXR, such dyslipidemia and its symptoms, atherosclerosis, low HDL (high density lipoprotein) or hypercholesterolemia, gallstones, hypertriglyceridemia, obesity, hencological disorders, or ischemia/reperfusion injury. In addition, the composition is used for diagnostics, prophylaxis, or as research reagents or with.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ö
cardiovascular disorder; dyslipidemia; atherosclerosis; high density lipoprotein; low density lipoprotein; hypercholesterolemia; gallstones; hypertriglyceridemia; obesity; neurological disorder; ischemia; reperfusion; diagnostics; prophylaxis.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       se; antidiabetic; immunosuppressive; cardiovascular; antilipemic; antiatteriosclerotic; hepatotropic; litholytic; anorectic; neuroprotective; vasotropic; antisense; gene therapy; Farnesoid X receptor; diabetes; immunological disorder; cardiovascular disorder; dyslipidemia; atherosclerosis; high density lipoprotein; low density lipoprotein; hypertoisprotein; low density lipoprotein; hypertoisprotein; sallstones; hypertriglyceridemia; obesity; neurological disorder; ischemia; reperfusion; diagnostics; prophylaxis.
                                                                                                                                                                                                                                                                    New antisense oligonucleotides useful for modulating expression of Farnesoid X Receptor (FXR) or for treating diseases associated with FXR, e.g. diabetes, immunological disorders, cardiovascular disorders,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Gape
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Farnesoid X receptor gene expression antisense inhibitory oligo #575.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             0.3%; Score 15.8; DB 1; Length 20; 89.5%; Pred. No. 3.3e+02; ive 0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Sequence 20 BP; 2 A; 5 C; 4 G; 9 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                    Claim 4; SEQ ID NO 877; 150pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                3477 GGAGAGTAAACCACCACCA 3495
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        GGAGAGTAAACGACCACAA 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ВР
                                                                                                                                                                 25-SEP-2002; 2002US-0413588P.
                                                                                                                                         25-SEP-2003; 2003WO-US030353
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ADO53202 standard; DNA; 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Local Similarity 89.9
                                                                                                                                                                                          (PHAA ) PHARMACIA CORP
                                                                                                                                                                                                                                                                                                           gallstones or obesity
                                                                                                                                                                                                                                           WPI; 2004-347928/32.
                                                                                       WO2004030750-A1
                                                               Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        15-JUL-2004
                                                                                                                15-APR-2004.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               invention.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        13
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ADO53202;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Query Match
                                                                                                                                                                                                                   Kane CD
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               RESULT 491
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ઠ
```

```
ô
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        The invention relates to an antisense compound 8-30 nucleobases in length targeted to a nucleic acid molecule encoding Farnesoid X receptor (FXR), where the antisense compound specifically hybridizes with and inhibits the expression of FXR. The composition and methods are useful for inhibiting the expression of FXR (Parnesoid X receptor) in cells or tissues, or for treating diseases or conditions associated with FXR, such as diabetes, immunological disorders, cardiovascular disorders, e.g. dyslipidemia and its symptoms, atheroscierois, low HDL (high density lipoprotein), elevated LDL (low density lipoprotein) or hypercholesterolemia, gallstones, hypertriglyceridemia, obesity, neurological disorders, or ischemia/reperfusion injury. In addition, the composition is used for diagnostics, prophylaxis, or as research reagents or kits. This sequence corresponds to an antisense oligonucleotide of the
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     New antisense oligonucleotides useful for modulating expression of Farnesoid X Receptor (FXR) or for treating diseases associated with FXR, e.g. diabetes, immunological disorders, cardiovascular disorders, gallstones or obesity.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    /mod_base= OTHER
/note= "OTHER= Phosphorothioate backbone. All cytidines
are 5-methylcytidines"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Endothelial differentiation gene 2 antisense oligonucleotide segid 71.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Gape
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  cytostatic, gene therapy, endothelial differentiation gene 2, antisense technology, disease identification, hyperproliferative disorder, human, antisense oligonucleotide, ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Score 15.8; DB 1; Length 20; Pred. No. 3.38+02; 0; Mismatches 2; Indel8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Sequence 20 BP; 1 A; 6 C; 4 G; 9 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Claim 4; SEQ ID NO 575; 150pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   3477 GGAGAGTAAACCACCACCA 3495
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ~
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 멾.
                                                                                                                                                25-SEP-2003; 2003WO-US030353
                                                                                                                                                                                                                    25-SEP-2002; 2002US-0413588P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           20 GGAGAGTAAACGACCACAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Query Match
Best Local Similarity 89.5%;
Matches 17; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ADN01338 standard; DNA; 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Ω
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         29-JUL-2004 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1. .20
/*tag=
                                                                                                                                                                                                                                                                                            (PHAA ) PHARMACIA CORP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     /*tag=
                                                                                                                                                                                                                                                                                                                                                                                                                                        WPI; 2004-347928/32.
WO2004030750-A1.
```

```
15-JUL-2002; 2002KR-00041304.
 KR2004008012-A
                          28-JAN-2004
                                                                                                                                                                                                                                              tumor.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            RESULT 494
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ADQ14094
  ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         g
                                                                                                                                                                                                                                                                                                                                                The invention describes a compound targeted to a nucleic acid molecule encoding endothelial differentiation gene 2. The compound, 8-80 nucleobases in length, is targeted to a nucleic acid molecule encoding cand chelial differentiation gene 2, where the compound specifically complete with the nucleic acid molecule encoding the endothelial differentiation gene 2 comprising a sequence of 1576 bp (SEQ ID NO: 4) differentiation gene 2 compound a sequence of 1576 bp (SEQ ID NO: 4) described are: a method of inhibiting the expression of the endothelial differentiation gene 2; a diagnostic method for indentifying a disease state; a kit or assay device comprising the compound; and treating an animal having a disease or condition associated with endothelial differentiation gene 2 compound so that expression of endothelial differentiation gene 2 compound so that expression of methods are useful in treating an animal having a disease or condition, comethods are useful in treating an animal having a disease or condition, i.e. hyperproliferative disorder. This sequence represents a human condition dend the liet methods are useful in treating an animal having a disease or condition, i.e. hyperproliferative disorder. This sequence represents a human condition gene 2 antisense oligonucleotide.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       coding mononucleotide repeat; cMNR; antibody; MSI-H tumour;
MSI-H carcinoma; high microsatellite instability tumour;
high microsatellite instability carcinoma; cytostatic; PCR; primer; ss.
                                                                                                                                                                                                                                                                        compound that modulates endothelial differentiation gene 2 ression, useful in treating an animal having a disease or condition,
/mod_base= OTHER
/note= "OTHER= 2'-O-Methoxyethyl (2'-MOE) nucleotides"
15. .20
                                                               /note= "OTHER= 2'-O-Methoxyethyl (2'-MOE) nucleotides"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Score 15.8; DB 1; Length 20; Pred. No. 3.3e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Sequence 20 BP; 9 A; 2 C; 3 G; 6 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        0; Mismatches
                                                                                                                                                                                                                                                                                                                              Example 15; SEQ ID NO 71; 121pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  4926 ATTTTGTATTGAAAAGAT 4944
                                                                                                                                                                                                                                                                                                    i.e. hyperproliferative disorder
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1 ATTTTGCAATGAAAAGAT 19
                                                          base= OTHER
                                                                                                                                                                                                                          Dobie KW
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ADQ59323 standard; DNA; 20 BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Query Match
Best Local Similarity 89.5%;
Matches 17; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    KIAA1096 forward PCR primer.
                                                                                                                                               13-NOV-2002; 2002US-00292337.
                                                                                                                                                                          13-NOV-2002; 2002US-00292337.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            09-SEP-2004 (first entry)
                                                                                                                                                                                                  (ISIS-) ISIS PHARM INC
                                               /*tag=
                                                                                                                                                                                                                            Dean NM,
                                                          /mod
                                                                                                                                                                                                                                                    WPI; 2004-374980/35.
                                                                                                                                                                                                                                                                                          expression, useful
                                                                                                 US2004092462-A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Homo sapiens.
Synthetic.
                                 modified base
                                                                                                                                                                                                                             Bennett CF,
                                                                                                                        13-MAY-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ADQ59323;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    RESULT 493
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      à
```

```
The present invention describes genes containing coding mononucleotide repeats (cMNRs). The genes are useful for the development of an antibody gainst MSI-H (hugh microsatallite instability) tumour. Also described: (1) cDNA genes containing cMNRs with 10 or more nucleotide sequences, and selected from the cDNA genes having the nucleotide sequences of SEQ ID selected from the cDNA genes having the nucleotide sequences of SEQ ID 37, 39, 41 and 43; (2) cDNA genes, which are frameshift mutated by clettion or insertion of one or more base in the cMNRs; (3) genomic DNA deletion or insertion of one or more base in the cMNRs; (3) genomic DNA clettion for more nucleotide sequences of SEQ ID consists of the genomic DNA genes having the nucleotide sequences of SEQ ID consists, 4, 6, 8, 10, 12, 14, 16, 18, 20, 22, 24, 26, 28, 30, 32, 34, 36, 38, 40, 42 and 44; and (4) genomic DNA genes, which are frameshift to mutated by deletion or insertion of one or more base in the cMNRs. The genes have cytostatic activity. The present sequence represents a PCR primer which is used in an example from the present invention.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Human, SCAIP, CAPN3, DYSF, calpain; calcium-activated neutral protease,
limb-girdle muscular dystrophy type 2A, LGMD2A, dysferlin;
limb-girdle muscular dystrophy type 2B, LGMD2B; PCR; primer; 88;
Single Condition Amplification/ Internal Primer.
                                                                                                                                                                                                                                                                                                                                                            Genes containing coding mononuclectide repeats are useful in developing an antibody against MSI-H (hugh (sic high) microsatellite instability)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     0.3%; Score 15.8; DB 1; Length 20; 99.5%; Pred. No. 3.3e+02; ve. 0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Sequence 20 BP; 10 A; 1 C; 7 G; 2 T; 0 U; 0 Other;
                                                                                                                                                                                                                                         Rhee HS;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CAPN3/DYSF PCR primer, SEQ ID 491.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        3130 GTAAATGAAGAATGGAAAA 3148
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Example 3; Page 9; 578pp; Korean.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   17-DEC-2003; 2003WO-US040278.
15-JUL-2002; 2002KR-00041304.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       89.5%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ADQ14094 standard; DNA; 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         07-OCT-2004 (first entry)
                                                                                                                                                                                                                                         Lee JS,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Query Match 0.3
Best Local Similarity 89.5
Matches 17; Conservative
                                                                                                                                                                                                                                                                                                         WPI; 2004-386326/36.
                                                                KIM H G.
KIM N G.
LEE J S.
RHEE H S.
                                                                                                                                                                                                                                         Kim HG, Kim NG,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    WO2004058985-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        15-JUL-2004.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ADQ14094;
                                                                       KIMH/)
                                                                                                                                                                            RHEE/)
                                                                                                        KIMN/)
                                                                                                                                        LEEJ/)
```

```
(IGAK-) IGAKU SEIBUTSUGAKU KENKYUSHO KK
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Synthetic.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AAX27520;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Bird CR,
                                                                                                                                                                                                                                                                                                                                                                                                                                                         RESULT 496
   셤
                                                                                                                                                                                                                                                                                                                                                                à
                                                                                                                                                                                                                                                           The present invention relates to a Single Condition Amplification/
Internal Primer (SCAIP) sequencing method for direct sequence analysis of
Internal Primer (SCAIP) sequencing method for direct sequence analysis of
In multi-exon genes from genomic DNA samples and identifying mutations
in multi-exon genes e.g. the dystrophin gene, CAPN3 gene and DYSF gene.
Whatations in the dystrophin gene reault in both Duchenne Muscular
Dystrophy (DMD) and Becker Muscular Dystrophy (BMD). Mutations in the
CAPN3 gene, encoding calpain (calcium-activated neutral protease) result
in limb-girdle muscular dystrophy type 2A (LGMDZA) and mutations in the
DYSF gene, encoding dysferlin, result in limb-girdle muscular dystrophy
CC type 2B (LGMDZB). The method comprises bringing into contact in each of
the reaction chambers an amplicon from a different one of the
amplification reactions and one or more internal sequencing primers
CC amplification reactions and one or more internal sequencing primers
CC corresponding to the amplicon and analysing the sequences of the
amplification and analysis for the rapid, accurate, and economical
canalysis of any large multi-exon gene. It is also useful for the
genetic mutations in any large multi-exon gene. It is also useful for the
indentification and analysis of specific individual genomic mutations,
cincluding deletions, point mutations, or its combinations, gene complexes
with multiple exons/introns spanning large genomic regions. The present
cc sequence is a PCR primer, used in the method of the invention.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Gaps
                                                                                                                                              genetic

    PCR primer for constant reion of anti-Fas antibody heavy chain.

                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Variable region; heavy chain; anti-Fas antibody; human; mouse; immunoglobulin G; IgG; light chain; treatment; diagnosis; autoimmune disease; PCR primer; 88.
                                                                                                                                          Characterizing a nucleic acid region, useful for detecting ger mutations in any large multi-exon gene e.g., those indicating dystrophinopathy, comprises using a Single Condition Amplification/Internal Primer (SCAIP) sequencing method.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        0.3%; Score 15.8; DB 1; Length 20; 89.5%; Pred. No. 3.3e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               2; Indels
                                                                       Von Niederhausern A;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Sequence 20 BP; 6 A; 2 C; 9 G; 3 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               0; Mismatches
                                                                                                                                                                                                                                    Example 9; Page 45; 174pp; English.
                                                                     Weiss RB, Dunn DM,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               4190 ACGAAGTGTCCATGTGGGA 4208
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AGGAAGAGTCCATGTGGGA 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AAV37276 standard; DNA; 21 BP
 17-DEC-2002; 2002US-0433774P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           97JP-00191769
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             96JP-00172228
96JP-00268737
                                   (UTAH ) UNIV UTAH RES FOUND
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  10-SEP-1998 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Local Similarity 89.5
es 17; Conservative
                                                                                                         WPI; 2004-525893/50
                                                                     Planigan KM,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Synthetic.
Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    JP10165178-A
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         01-JUL-1997;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           02-JUL-1996;
09-OCT-1996;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     23-JUN-1998
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AAV37276;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ઠે
```

```
ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    The invention relates to two isolated cDNA molecules ((pASC6) and (pACOS7)) encoding 1-aminocyclopropane-1-carboxylic acid synchase (ACS) and an ethylene forming enzyme (EFE), respectively. The clones are deposited under the Accession Numbers NCIMB 40813 and NCIMB 40814, respectively. pASC6 and pACOS7 may be used to genetically control processes involved in fruit ripening (and other ethylene related processes involved in fruit ripening (and other ethylene related processes). Vectors comprising the cDNA sequences may be used to produce transgenic bananas with altered fruit ripening characteristics. The orientation of the pASC6 and pACOS7 used in the construct, will determine how the ripening process is affected. If the genes have a sense
                                                                                                  PCR primers AAV37276-77 are used to amplify the constant region of the heavy chain of human immunoglobulin G (IgG). The PCR product is used to create an anti-Fas antibody. The anti-Fas antibody can be used for the
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1-aminocyclopropane-1-carboxylic acid synthase; ACS; EFB; banana; ethylene forming enzyme; ethylene biosynthesis; plant; fruit ripening; transgenic; enzyme; inhibition; flavour; texture; PCR primer; ss.
DNA encoding, e.g. variable region of anti-Fas antibody - useful for, e.g. diagnosis and treatment of auto-immune diseases.
                                                                                                                                                                                                                                                                                                   Gaрв
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Novel isolated cDNA molecules ((pASC6) and (pACOS7)) encoding 1-aminocyclopropane-1-carboxylic acid synthase (ACS) and an ethylene forming enzyme (EFE) - useful for modifying fruit ripening
                                                                                                                                                                                                                                                                                                   .;
0
                                                                                                                                                                                                                                                        Score 15.8; DB 1; Length 21; Pred. No. 3.3e+02;
                                                                                                                                                                                                                                                                                                   2; Indels
                                                                                                                                                                                                                Sequence 21 BP; 4 A; 10 C; 5 G; 2 T; 0 U; 0 Other;
                                                                                                                                                                       treatment and diagnosis of autoimmune diseases
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Banana EFE gene fragment amplifying 5' primer.
                                                                                                                                                                                                                                                                                                   0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        characteristics, especially in bananas.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Example 2; Col 7-8; 22pp; English.
                                                              Example 3; Раде 7; 16pp; Japanese.
                                                                                                                                                                                                                                                                                                                                             366 CCTCCACCAACAGCCCATC 384
                                                                                                                                                                                                                                                                                                                                                                                     2 cerceaceaceaceare 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               BP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         96US-00632598
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 96US-00632598
                                                                                                                                                                                                                                                        Query Match
Best Local Similarity 89.5%;
Matches 17; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AAX27520/c
ID AAX27520 standard; DNA; 21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    26-MAY-1999 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Fletcher JD;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 WPI; 1999-228611/19.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            (ZENE ) ZENECA LTD.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         15-APR-1996;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    15-APR-1996;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    JS5886164-A
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              23-MAR-1999
```

```
AAZ65654 to AAZ69578 represent human biallelic markers from the present invention, which contain a polymorphic base at position 24 of their mucleotide sequences. AAZ6579 to AAZ7440 represent amplification primers for the biallelic markers. The biallelic markers of the invention have a variety of uses: they can be used for high density mapping of the human genome, and in complex association studies and haplotyping studies which are useful in determining the genetic basis for disease states. Compositions and methods of the invention can also be useful for the identification of the targets for the development of pharmaceutical agents and diagnostic methods, as well as the characterisation of the disconses to and side effects from
                                                                                                                                                                                                                                                                                                                                          ö
orientation, and transcribe mRNA that encodes an active enzyme, the rate of ripening will be increased (up-regulation) (however, full-length sense constructs can also be used to inhibit enzyme expression by constructs can also be used to inhibit enzyme expression by constructs of genes encode antisense mRNA, they will inhibit the process down (down-regulation). In this manner different spatial and temporal patterns of genes expression can be produced. Retardation of the zete of ripening will reduce the rate of deterioration of banana fruit after harvest. This helps in production of high quality fruit that has improved flavour and texture. Sequences AAX27517-531 represent primers based on sequences conserved between 6 species, for PCR amplification of EFE gene fragments from bananas
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      construct a high density disequilibrium
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Human biallelic marker downstream amplification primer SEQ ID NO:8727.
                                                                                                                                                                                                                                                                                                                                          Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Human genome; biallelic marker; high density disequilibrium map; genomic map; haplotype; phenotype; polymorphic base; genotyping; haplotyping; hybridisation; identification; characterisation; amplification; single nucleotide analyzation;
                                                                                                                                                                                                                                                                                                                                          ö
                                                                                                                                                                                                                                                                                                 0.3%; Score 15.8; DB 1; Length 21;
89.5%; Pred. No. 3.3e+02;
tive 0; Mismatches 2; Indels
                                                                                                                                                                                                                                                               Seguence 21 BP; 4 A; 6 C; 6 G; 5 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Claim 8; Page 2091; 2745pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Chumakov I;
                                                                                                                                                                                                                                                                                                                                                                                  2880 GAAGAAGTTGCTCTCACAG 2898
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Novel biallelic markers used to map of the human genome.
                                                                                                                                                                                                                                                                                                                                                                                                           21 GAAGAAGGTGCTCTCCCAG 3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AAZ74371 standard; DNA; 21 BP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               98US-0082614P.
98US-0109732P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             99WO-IB000822.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 (first entry)
                                                                                                                                                                                                                                                                                                     Query Match
Best Local Similarity 89.5
Matches 17; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Blumenfeld M,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       WPI; 2000-013267/01.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          (GEST ) GENSET
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           diagnosis; ss
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    WO9954500-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             21-APR-1999;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    21-APR-1998;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    23-NOV-1998;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   10-SEP-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         28-OCT-1999.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Cohen D,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  RESULT 497
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          엄
```

```
ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               The invention relates to the use of a polypeptide (ABB44544-ABB44601, ABB44664-ABB44623) or its variant or encoding nucleic acid (ABA81990-ABA81995, ABA82016-ABA82032) with vulnerary and/or dermacrological activity for the diagnosis, prevention and treatment of skin disorders and treatment in wound healing or for the identification of pharmacologically active substances. The nucleic acids are useful in gene therapy. The present sequence is that of a PCR primer, useful to the invention. Note: The printed sequence listing for this specification was incomplete, terminating part way through SEQ ID NO 106. The remaining data was obtained from EPO data for an equivalent patent (EP1114862)
                                                                                                                                                     ö
pharmaceutical agents acting on a disease as well as other treatment. N.B. The SEQ ID NOS 2852, 2913, 2974, 3035, 3096, 3157, 3227, 3297 and 3367, are not actually given a sequence in the Sequence Listing from the present invention
                                                                                                                                                                                                                                                                                                                                                                                                                                   vulnerary; dermatological; skin disorder; wound healing;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Use of novel polypeptide or its variant or nucleic acid encoding the polypeptide for diagnosing and/or preventing and/or treating skin disorders and/or treatment in wound healing or for identifying active
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Gaps
                                                                                                                                                      Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ö
                                                                                                                                                      ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   0.3%; Score 15.8; DB 1; Length 21;
89.5%; Pred. No. 3.3e+02;
iive 0; Mismatches 2; Indels
                                                                                                                Score 15.8; DB 1; Length 21;
Pred. No. 3.3e+02;
0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       .
.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Halle
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Sequence 21 BP; 3 A; 6 C; 4 G; 8 T; 0 U; 0 Other;
                                                                                      Sequence 21 BP; 5 A; 6 C; 2 G; 8 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Werner S,
                                                                                                                                                                                                                                                                                                                                                                                                    Wound healing related PCR primer SEQ ID NO 66.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Example 2; Page 53; 265pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Goppelt A,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        3258 CATTIGIGICCCTTIGICA 3276
                                                                                                                                                                                       4736 TITICAAAAITAIGICICC 4754
                                                                                                                                                                                                                       3 rrrrcaaaargargrccc 21
                                                                                                                                                                                                                                                                                                          BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      17-NOV-1999; 99DE-01055349.
17-DEC-1999; 99US-0172511P.
20-JUN-2000; 2000DE-01030149.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        16-NOV-2000; 2000CA-02325226.
                                                                                                                                                                                                                                                                                                                                                                                                                                                          gene therapy; PCR primer; ss
                                                                                                                       Query Match 0.3%;
Best Local Similarity 89.5%;
Matches 17; Conservative
                                                                                                                                                                                                                                                                                                        ABA81997 standard; DNA; 21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Query Match
Best Local Similarity 89.5'
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         (SWIT-) SWITCH BIOTECH AG
                                                                                                                                                                                                                                                                                                                                                                            (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Regenbogen J, Wolf E,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        WPI; 2001-433142/47.
                                                                                                                                                                                                                                                                                                                                                                                                                                              Human; mouse;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CA2325226-A1.
                                                                                                                                                                                                                                                                                                                                                                            25-JAN-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            17-MAY-2001.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             substances.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Synthetic.
                                                                                                                                                                                                                                                                                                                                            ABA81997;
                                                                                                                                                                                                                                                                            RESULT 498
                                                                                                                                                                                                                                                                                              ABA81997
                                                                                                                                                                                                                                                                                                                             ð
             ន្តដូន្តនូន
                                                                                                                                                                                              ò
```

```
Homo sapiens
Unidentified
                                                            JS6262346-B1
                                                                                 17-JUL-2001.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 09-SEP-2004
12-SEP-2001
                                           Persea sp.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AAH62183;
                                                                                                                                                                 Bird CR,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      RESULT 501
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AAH62183
  ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ö
                                                                                                                                                                                                                                                                                                                                                                                                                          The invention relates to the use of a polypeptide (ABB44544-ABB44601, ABB44606-ABB44603) or its variant or encoding nucleic acid (ABA81990-ABA81995). ABA819195 ABA820132) with vulnerary and/or dermacrological activity for the diagnosis, prevention and treatment of skin disorders and treatment in wound healing or for the identification of pharmacologically active substances. The nucleic acids are useful in gene therapy. The present sequence is that of a PCR primer, useful to the invention. Note: The printed sequence listing for this specification was incomplete, terminating part way through SEQ ID NO 106. The remaining data was obtained from EPO data for an equivalent patent (EPI114862)
                                                                                                                                 Human; mouse; vulnerary; dermatological; skin disorder; wound healing; gene therapy; PCR primer; 88.
                                                                                                                                                                                                                                                                                                                                                    Use of novel polypeptide or its variant or nucleic acid encoding the polypeptide for diagnosing and/or preventing and/or treating skin disorders and/or treatment in wound healing or for identifying active
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            PCR primer #4 used to clone ethylene-forming enzyme (EPE) from banana
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Gapa
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Score 15.8; DB 1; Length 21;
Pred. No. 3.3e+02;
0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                               Halle J;
                                                                                                             Mouse wound healing related PCR primer SEQ ID NO 68.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Sequence 21 BP; 3 A; 6 C; 4 G; 8 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                               Werner S,
                                                                                                                                                                                                                                                                                                               Goppelt A,
                                                                                                                                                                                                                                                                                                                                                                                                         Example 5; Page 58; 265pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        3258 CATTGTGTCCCTTTGTCA 3276
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  3 CAGTTGTGTCCCATTGTCA 21
                                                  BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                BP.
                                                                                                                                                                                                                                                 17-NOV-1999; 99DE-01055349
17-DEC-1999; 99US-0172511P
20-JUN-2000; 2000DE-01030149.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Query Match 0.3%;
Best Local Similarity 89.5%;
Matches 17; Conservative (
                                                                                                                                                                                                                            16-NOV-2000; 2000CA-02325226
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AAS09920 standard; DNA; 21
                                                 ABA81999 standard; DNA; 21
                                                                                          (first entry)
                                                                                                                                                                                                                                                                                          SWIT-) SWITCH BIOTECH AG.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        24-OCT-2001 (first entry)
                                                                                                                                                                                                                                                                                                               Wolf E,
                                                                                                                                                                                                                                                                                                                                   WPI; 2001-433142/47.
                                                                                                                                                                                                                                                                                                               Regenbogen J,
                                                                                         25-JAN-2002
                                                                                                                                                                 Mus musculus
                                                                                                                                                                                     CA2325226-A1
                                                                                                                                                                                                         17-MAY-2001
                                                                                                                                                                                                                                                                                                                                                                                      substances.
                                                                     ABA81999;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AAS09920
                               RESULT 499
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           RESULT 500
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AASO9920/
ID AASO
XX AASO
XX AASO
DT 24-OO
XX XX
                                      음
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         요
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ઠે
```

```
The sequence represents PCR primer #4 from avocado used to design a degenerate PCR primer, BEFE-5 (AAS09924) which was used to clone ethylene for forming enzyme (EFE) from banana, used in the method of the invention.

The method involves modifying the level of ethylene biosynthesis in a plant of the genus Musa by inserting into the genome of the plant a DNA sequence (I) encoding a banana 1-aminocyclopropane-1- carboxylic acid synthase (ACS) or an ethylene-forming enzyme (EFE), where (I) is in sense or antiense configuration, and modifies the level of activity of ACS or EFE. This retards the rate of ripening in banana fruits which reduces the care of deterioration of banana fruit after harvest. As a result, fruit may be harvested when they have reached partial or full ripeness and still have the robustness to withstand handling and transport to reach the consumer in good condition. In this way high quality ripe fruit can be made available to the consumer with reduced requirement for post.

Charvest treatment. High quality fruit will have improved flavour and texture. High quality fruit can be produced consistently over a wide the consumer the consumer with results and periods and such fruit can be held in store for long periods and consistents.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Modifying level of ethylene biosynthesis in plant of genus Musa, involves inserting into genome of plant a DNA sequence encoding banana 1-aminocyclopropane-1-carboxylic acid synthase or ethylene-forming enzyme.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Gaps
1-aminocyclopropane-1-carboxylic acid synthase; ACS; banana;
ethylene biosynthesis; ethylene-forming enzyme; BFB; fruit ripening;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Single nucleotide polymorphism, SNP, human, cancer, inflammation, heart disease, paternity testing, forensic science, ds.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ripened to optimal quality by the supply of exogenous ethylene
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       0.3%; Score 15.8; DB 1; Length 21; 89.5%; Pred. No. 3.3e+02; live 0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Sequence 21 BP; 4 A; 6 C; 6 G; 5 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             APLP2 polymorphism containing DNA fragment #84.
                                                                                            fruit storage; PCR primer; avocado; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                2880 GAAGAAGTTGCTCTCACAG 2898
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Example 2; Col 8; 23pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   m
                                                                                                                                                                                                                                                                                                                                                                                                                                                  99US-00231240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          96US-00632598
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               21 GAAGAAGGTGCTCTCCCAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AAH62183 standard; DNA; 21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            (revised)
(first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Best Local Similarity 89.5
Matches 17; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Fletcher JD;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        WPI; 2001-450497/48.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        (ZENE ) ZENECA LTD.
                                                                                                                                                                                                                                                                                                                                                                                                                                                  15-JAN-1999;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          15-APR-1996;
```

```
ô
                                                                                                                                                                                                                                                                                                                                                                                                                 DNA sequences AAH62100 - AAH62688 represent segments of human genes which contain single nucleotide polymorphisms (SNPs). A method is included in the invention for analysing a nucleic acid sample, which consists of determining the base occupying any one of the polymorphic sites of disgnosis or monitoring of diseases, such as cancer, inflammation, heart diseases, diseases of the cardiovascular system, and infection by microorganisms. The oligonucleotides are also useful in the manufacture of a medicament for the treatment or prophylaxis of the diseases, and as a pharmaceutical. SNP containing oligonucleotides are useful in an east of a pharmaceutical supplications such as phenotype correlation, forensics, paternity testing,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Endothelin, EDN; endothelin converting enzyme; ECE; endothelin receptor; EDNR; signaling system; cardiovascular disease; coronary heart disease; hypertension; atherosolerosis; angiogenesis; fatty acid metabolism; diabetes; familial hypercholesterolaemia; forensic marker; transgenic animal; solid support; cardiovascular regulator; SNP; single nucleotide polymorphism; PCR; primer; ss.
                                                                                                                                                                                                                                                                                                                  New nucleic acid segments of the human genome, particularly from genes including polymorphic sites, for phenotype correlation, forensics, paternity testing, medicine and genetic analysis.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Revised record issued on 09-SEP-2004 : Correction to Feature Table Key
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Endothelin converting enzyme 1 (ECE-1) SNP detection primer #146.
                                  /*tag= a
/standard name= "single nucleotide polymorphism"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            / Match 0.3%; Score 15.8; DB 1; Length 21; Local Similarity 89.5%; Pred. No. 3.3e+02; nes 17; Conservative 0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Sequence 21 BP; 11 A; 0 C; 9 G; 1 T; 0 U; 0 Other;
                                                                                                                                                                                                                   (WHED ) WHITEHEAD INST BIOMEDICAL RES.
Location/Qualifiers
                                                                                                                                                                                                                                                       Lander ES;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   2907 AGAGGAAGAGGAAGACAAA 2925
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AGAGGAAGAGGAAGATGAA 20
                                                                                                                                                                                                                                                                                                                                                                                         Claim 1; Page 36; 80pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Bb.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  medicine and genetic analysis
                                                                                                                                                  17-NOV-2000; 2000WO-US031639.
                                                                                                                                                                                      99US-0167334P
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ABK94358 standard; DNA; 21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            (first entry)
                                                                                                                                                                                                                                                       Ireland JS,
                                                                                                                                                                                                                                                                                       WPI; 2001-367705/38.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 WO200224747-A2
                                                                                    WO200138576-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            27-AUG-2002
                                                                                                                                                                                      24-NOV-1999;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   28-MAR-2002
                                                                                                                    31-MAY-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Synthetic
                                                                                                                                                                                                                                                          Cargill M,
 Key
variation
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ABK94358;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       RESULT 502
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ABK94358/
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ઠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     요
```

```
The invention describes a polynucleotide (I) of the endothelin (EDNR) (EDNR) / Endothelin converting enzyme (ECE) / receptors of EDN and ECE (EDNR) (EDN) / endothelin converting enzyme (ECE) / receptors of EDN and ECE (I), signaling system which is associated with a cardiovascular disease. (I) the gene encoding EDN, ECE or EDNR (II) or a vector (III) expressing a molecular variant gene comprising (I) is useful for identifying and conclusion as pro-drug or drug capable of modularing the activity of a molecular variant of a polypeptide of the EDN/EDNR/ECE signaling system or its gene product. Or for identifying and obtaining an inhibitor of the cortivity of a molecular variant of a polypeptide of the EDN/EDNR/ECE signaling system or its gene product. The isolated proteins and conjunctedides encoding them are useful for preparation of a polymorleotides encoding them are useful for preparation of a polymorleotides encoding them are useful for preparation of a polymorleotides encoding them are useful as corensis, or related to comportant angiogenesis or fatty acid metabolism e.g. diabetes and familial compormal angiogenesis or fatty acid metabolism e.g. diabetes and familial compormal angiogenesis or fatty acid metabolism e.g. diabetes and comported transgenic animal and in creation of a solid support creating a transgenic animal and in creation of a solid support creating a transgenic animal and in creation of a solid support creating a transgenic animal and in creation of a solid support creating a transgenic animal and in creation of a solid support creating the invention. This sequence represents a PCR primer used to identify single nucleotide polymorphisms in DNA encoding cardiovascular regulator proteins of the EDN/ECE/EDNR signaling pathway sequence represents a polymorphisms in DNA encoding corensing polymorphisms of the EDN/ECE/EDNR signaling pathway sequence represents a polymorphisms in DNA encoding corensing polymorphisms of the EDN/ECE/EDNR signaling pathway and the EDN/ECE/EDNR signaling pathway and th
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ö
                                                                                                                                                                                                                                                             Novel polynucleotide of the endothelin/endothelin converting enzyme signaling enzyme/receptors of endothelin and endothelin converting enzyme signaling system associated with cardiovascular disease, useful for treating the
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Endothelin; EDN; endothelin converting enzyme; ECE; endothelin receptor; EDNR; signaling system; cardiovascular disease; coronary heart disease; hypertension; atherosolerosis; angiogenesis; fatty acid metabolism; diabetes; familial hypercholesterolaemia; forensic marker; transgenic animal; solid support; cardiovascular regulator; SNP; single nucleotide polymorphism; PCR; primer; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Endothelin converting enzyme 1 (ECE-1) SNP detection primer #145.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           0.3%; Score 15.8; DB 1; Length 21;
89.5%; Pred. No. 3.38+02;
tive 0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Sequence 21 BP; 4 A; 7 C; 7 G; 3 T; 0 U; 0 Other;
                                                                                                                  (EPID-) EPIDAUROS BIOTECHNOLOGIE AG.
                                                                                                                                                                                                                                                                                                                                                                                                   Example 6; Page 67; 190pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         4515 CCCTCGAAGGGCCCCAGAG 4533
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CCCTCGATGTGGCCCAGAG
             31-AUG-2001; 2001WO-EP010087
                                                                19-SEP-2000; 2000EP-00120123
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         27-AUG-2002 (first entry)
                                                                                                                                                                        Brinkmann U, Hoffmeyer S;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Local Similarity 89.5
hes 17; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ABK94357 standard; DNA;
                                                                                                                                                                                                                        WPI; 2002-435060/46.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Synthetic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ABK94357;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              19
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Query Match
                                                                                                                                                                                                                                                                                                                                                           disease.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            RESULT 503
                                                                                                                                                                                                                                                                             Novel
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ABK94357
%$GGGGGGGGGGGGGGGGGGGGGGG$
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ò
```

disease.

```
The present sequence is a PCR primer for murine alpha 1-antichymotrypsin (ACT) CDNA (see ABV7614). It was used, with the primer given in ABV76148, in examples from the invention describing the PCR amplification of murine ACT to examine expression in normally healing, well healing and different types of poorly healing wounds with different pathogenic backgrounds, and to examine the kinetics of ACT expression during wound healing in healing and diabetic mice. The invention is based on the discovery that decreased expression of ACT is causally involved in poor wound healing, specifically in poorly healing diabetes-associated and poorly healing arterial wounds. An ACT polypeptide, including murine ACT, a nucleic acid encoding it, or a cell expressing the ACT polypeptide or nucleic acid encoding it, can be used for the diagnosis, treatment and/or prevention of diabetes-associated and/or arterial wounds which heal
                                                                                                                                                                                                                                                                                                                                                                                                               Use of alpha 1-antichymotrypsin polypeptide or nucleic acids encoding the polypeptide, or of a cell expressing the polypeptide, or of antibody against the polypeptide, for diagnosing, treating or preventing poorly-
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Collagen; procollagen; pro-alpha chain; vulnerary; gene therapy;
drug delivery; PCR; primer; 88.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Query Match 0.3%; Score 15.8; DB 1; Length 21; Best Local Similarity 89.5%; Pred. No. 3.3e+02; Matches 17; Conservative 0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Sequence 21 BP; 3 A; 6 C; 4 G; 8 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      keratinocytes, fibroblasts or endothelial cells
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Pro-alphal(III) chain 5' PCR primer.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Example 1; Page 38; 70pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    3258 CATTIGIGICCCTTIGICA 3276
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             cells are autologous or allogenic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      3 CAGTTGTGTCCCATTGTCA 21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               23-OCT-2001; 2001GB-00025369.
23-OCT-2001; 2001GB-00025372.
                                                                                           30-APR-2002; 2002WO-EP004757
                                                                                                                                               30-APR-2001; 2001DE-01021255
18-SEP-2001; 2001US-0323348P
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        23-OCT-2002; 2002WO-GB004785.
                                                                                                                                                                                                                                                                                                    Hof P;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ACC58762/c
ID ACC58762 standard; DNA; 21
                                                                                                                                                                                                                                          Ŗġ.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 26-AUG-2003 (first entry)
                                                                                                                                                                                                                                       (SWIT-) SWITCH BIOTECH
                                                                                                                                                                                                                                                                                                    Goppelt A,
                                                                                                                                                                                                                                                                                                                                                        WPI; 2003-103450/09
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    WO2003035692-A2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          healing wounds.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Unidentified.
                                 07-NOV-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              01-MAY-2003
                                                                                                                                                                                                                                                                                              Halle J,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ACC58762;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          RESULT 505
      ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      The invention describes a polynucleotide (I) of the endothelin (EDN)/endothelin converting enzyme (ECE)/receptors of EDN and ECE (EDNR) adjanaling system which is associated with a cardiovascular disease. (I), the gene encoding EDN, ECE or EDNR (II) or a vector (III) expressing (I) the gene encoding EDN, ECE or EDNR (II) or a vector (III) expressing (I) or a vector (III), the EDN, ECE or EDNR polypeptide of expressing a molecular variant gene comprising (I) is useful for identifying and constening a pro-drug or drug capable of modulating the activity of a molecular variant of a polypeptide of the EDN/EDNR/ECE signaling system or its gene product. The isolated proteins and cor its gene product. The isolated proteins and polynucleotides encoding them are useful for preparation of a plarmaceutical composition for treating a cardiovascular disease such as coronary heart disease, hypertension, atherosolarosis, or related to abnormal anglogenesis or fatty acid metabolism e.g. diabetes and familial hypercholesterolaemia. The gene or a polynucleotide fragment of the EDN/EDNR for composition or tatty acid metabolism e.g. diabetes and familial hypercholesterolaemia. The gene or a polynucleotide fragment of the EDN/EDNR signaling system are useful as forensic markers, for creating a transgenic animal and in creation of a solid support composition plantide in DNA ancoding a PCR primer used to identify a since the invention. This sequence represents a PCR primer used to identify a planting the polymerholestide polymerholest
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ö
                                                                                                                                                                                                                                                                                                                                                                                                         Novel polynucleotide of the endothelin/endothelin converting enzyme/receptors of endothelin and endothelin converting enzyme signaling system associated with cardiovascular disease, useful for treating the
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         to identify single nucleotide polymorphisms in DNA encoding cardiovascular regulator proteins of the EDN/ECE/EDNR signaling pathway
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Alpha 1-antichymotrypsin; protease; inhibitor; mouse; vulnerary; antiulcer; wound healing; gene therapy; PCR; primer; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     0.3%; Score 15.8; DB 1; Length 21; 89.5%; Pred. No. 3.3e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sequence 21 BP; 3 A; 7 C; 7 G; 4 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Mouse alpha 1-antichymotrypsin PCR primer.
                                                                                                                                                                                                                                 (EPID-) EPIDAUROS BIOTECHNOLOGIE AG.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Example 6; Page 67; 190pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            4515 CCCTCGAAGGGGCCCAGAG 4533
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CCTCGATGTGCCCAGAG 21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ABV76147 standard; DNA; 21 BP
                                                                                                                31-AUG-2001; 2001WO-EP010087
                                                                                                                                                                          19-SEP-2000; 2000EP-00120123
                                                                                                                                                                                                                                                                                              Brinkmann U, Hoffmeyer S;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Matches 17; Conservative
                                                                                                                                                                                                                                                                                                                                                     WPI; 2002-435060/46.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Best Local Similarity
WO200224747-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         WO200288180-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Mus musculus.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      07-MAR-2003
                                                            28-MAR-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ABV76147;
```

Query Match

셤 ò

ö

Gape

. 0

including skin cells such as

```
ADQ80726;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 (GENT-)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     (MELI-)
                                                                                                                                                                                      RESULT
                                                                                                                                                                                                                          셤
ð
                                                                                                                                                                                                                                                                                                                              ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Measuring DNA-dependent DNA polymerization in a biological sample, useful for drug susceptibility testing, comprises measuring the amount of incorporated modified deoxynucleoside triphosphate with the aid of a
                                                                                                                                              The present sequence is that of a 5' primer, which was used with the 3' primer given in ACC58763 for the PCR amplification of the pro-alphal(III) chain. The PCR product was used to prepare a DNA molecule (see ACC58766) encoding a modified pro-alpha chain (see ABR4261) in which decorin replaced the globular domain of the N-propeptide of the pro-alphal(III) chain. This is an example of modified pro-alpha chains of the invention that may form part of a procollagen molecule for incorporation into
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      The invention relates to measuring DNA-dependent DNA polymerization in a biological sample and involves measuring the amount of incorporated modified deoxymucleoside triphosphate with the aid of the label of a bound antibody. The method is useful in measuring DNA polymerization for
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          DNA polymerization; drug susceptibility; HIV; reverse transcriptase; RT;
                                                                         Novel modified pro-alpha-chain useful for treating wounds and fibrotic disorders, has triple helical forming domain linked to N-terminal domain that contains a polypeptide sequence from proteoglycan protein core.
                                                                                                                                                                                                                                                                                                                               Gaps
                                                                                                                                                                                                                                                                                                                               ö
                                                                                                                                                                                                                                                    disorders, in tissue replacement, and in cosmetic treatments
                                                                                                                                                                                                                                                                                                     0.3%; Score 15.8; DB 1; Length 21; 89.5%; Pred. No. 3.3e+02; ive 0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Template (CTGA)5-A for second strand synthesis by HIV RT.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Shao X;
                                                                                                                                                                                                                                                                             Sequence 21 BP; 7 A; 5 C; 6 G; 3 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     s,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Gronowitz
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Example 1; Page 31; 36pp; English.
                                                                                                                              Example 1; Page 33; 73pp; English
                                                                                                                                                                                                                                                                                                                                                          1876 GCCTTGAGGACGTTGACCA 1894
   (UYMA-) UNIV VICTORIA MANCHESTER
                                                                                                                                                                                                                                                                                                                                                                       ABZ75638 standard; DNA; 21 BP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      14-JUN-2001; 2001US-0297773P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Pettersson I,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               14-JUN-2002; 2002WO-SE001155
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                (first entry)
                                                                                                                                                                                                                                                                                                                   Best Local Similarity 89.5 Matches 17; Conservative
                              Bulleid NJ;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              WPI; 2003-167535/16.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             (CAVI-) CAVIDI TECH
                                                     WPI; 2003-504991/47
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            labeled antibody
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             WO2002103039-A1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Kaellander C,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                15-MAY-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      27-DEC-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Synthetic.
                                Kadler KE,
                                                                                                                                                                                                                                                                                                                                                                                   21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ABZ75638
                                                                                                                                                                                                                                                                                                          Query Match
```

ò ద

```
The present invention relates to a method (M1) for selecting an animal for the presence of a nucleic acid comprises testing the animal for the presence of a nucleic acid comprises testing the animal for the presence of a nucleic acid comprises testing the activity of an evolutionary conserved CpG island located in intron 3 of an IGP2 gene; and/or binding of a nuclear factor to an IGP2 gene. The nuclear factor is capable of binding to a stretch of nucleotides which in the wild type pig, mouse or human IGP2 gene is part of an evolutionary conserved CpG island, located in intron 3 of the IGP2 gene. The stretch is functionally equivalent to (ADQ80709). The nucleic acid modification in ADQ80709 comprises a G to A transition of the nucleic acid modification in ADQ80709 comprises a G to A transition CC The nucleic acid modification in ADQ80709 comprises a G to A transition of an IGP2 intron3-n13072. (M1) is useful for selecting an animal with corporaties related to muscle mass, fat deposition, and/or teat number. The properties related to muscle mass, fat deposition, and/or teat number. The construction of an IGP2 gene and ocated in intron 3 of an IGP2 gene and/or modulating binding of a nuclear factor to an IGP2 gene and/or modulating binding of a nuclear factor to an IGP2 gene and a method (M4) for identifying a compound capable of modulating binding of a nuclear factor to an IGP2 gene in a cell or organism. C modulating mRNA transcription of an IGP2 gene in a cell or organism.
                                                                                                                                                                                                                                                                                                                                   ..
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Selecting an animal for desired genotypic or potential phenotypic properties such as muscle mass and/or fat deposition, comprises testing for a single nucleotide polymorphism in intron 3 of the IGF2 gene.
drug susceptibility testing. Sequences ABZ75637-647 represent different templates used for second strand synthesis by HIV reverse transcriptase (RT)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Anorectic, Antidiabetic, Muscular, Gene Therapy; CpG island;
IGF2 gene intron 3; muscle mass; fat deposition; teat number; obesity;
muscle deficiency; diabetes; PCR; primer; ss; p1g.
                                                                                                                                                                                                                                                                                                                                       Gaps
                                                                                                                                                                                                                                                                                                                                       .
0
                                                                                                                                                                                                                                                            21;
                                                                                                                                                                                                                                                                        3.3e+02;
3.3e+02;
--- 2; Indels
                                                                                                                                                                                                                                                        0.3%; Score 15.8; DB 1; Length 89.5%; Pred. No. 3.3e+02;
                                                                                                                                                                                 Sequence 21 BP; 6 A; 5 C; 5 G; 5 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Buys N;
                                                                                                                                                                                                                                                                                                                                           0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Georges M,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Example 1; Page 20; 38pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                      4769 TGACTGACTGACTAAATGA 4787
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     2 TGACTGACTGACTGA 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     10-JAN-2003; 2003EP-00075091.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               10-JAN-2003; 2003EP-00075091.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Andersson L, Andersson G,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ADO80726 standard; DNA; 21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Porcine PULGE3 UP-primer.
                                                                                                                                                                                                                                                                        Query Match 0.3
Best Local Similarity 89.5
Matches 17; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               WPI; 2004-501307/48
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      UNIV LIEGE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          MELICA HB.
GENTEC BV.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              EP1437418-A1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                23-SEP-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 14-JUL-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Sus scrofa.
```

gibbs-10-667-022-4.rng

```
ö
(M3) and (M4) are useful for identifying compounds capable of modulating mRNA transcription of an IGF2 gene and/or modulating binding of a nuclear factor to an IGF2 gene. Compounds identified are potentially useful for treating obsaity, muscle deficiencies and diabetes. The present sequence is a primer which was used to produce porcine sequence tagged sites (STS) in an example from the invention.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Human; 88; antisense therapy; cytostatic; antiinflammatory; haemostatic; cerebroprotective; notropic; neuroprotective; antiparkinsonian; muscular; CD20; neurite growth inhibitor gene; NOG0; hammerhead ribozyme; DNAzyme; inozyme; G-cleaver; amberzyme; zinzyme; lymphoma; leukaemia; B-cell lymphoma; non-Hodgkin's lymphoma; NHL; lymphocytic leukaemia; MCL; immunodeficiency virus; HIV associated NHL; mantle-cell lymphoma; MCL; immunocytoma; IMC; immune thrombocytopsenia; stroke; dementia; inflammatory arthropathy; central nervous system injury; cerebrovascular accident; CVA; Alzheimer's disease; multiple sclerosis; chemotherapy:induced neuropathy; amyotrophic lateral sclerosis; ALS; Parkinson's disease; ataxia; Huntington's disease; Creutzfeldt-Jakob disease; muscular dystrophy; neurodegenerative disease.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              The invention relates to a nucleic acid molecule which down regulates expression of a CD20 gene and a nucleic acid molecule which down regulates expression of a neurite growth inhibitor gene (NOGO). The
                                                                                                                                                                                                       Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Nucleic acid molecules, e.g., enzymatic nucleic acids and antisense constructs, which down regulate expression of a CD20 gene or neurite growth inhibitor gene usfull for treating, e.g., lymphoma, leukemia, central nervous system injury.
                                                                                                                                                                                                       ö
                                                                                                                                                                 0.3%; Score 15.8; DB 1; Length 21; 89.5%; Pred. No. 3.3e+02;
                                                                                                                                                                                                     2; Indels
                                                                                                                               Sequence 21 BP; 4 A; 4 C; 7 G; 6 T; 0 U; 0 Other;
                                                                                                                                                                                                     0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Chowrira BM;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Human NOGO Hammerhead Ribozyme #63
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Claim 88; Page 67; 200pp; English.
                                                                                                                                                                                                                                         4311 TCCTGCAGATGGAAATCCT 4329
                                                                                                                                                                                                                                                                TCCTGCAGATAGAAAGCCT 1
                                                                                                                                                                                                                                                                                                                                                                       BP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          11-FEB-2000; 2000US-0181797P.
28-FEB-2000; 2000US-0185516P.
06-MAR-2000; 2000US-0187128P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        09-FEB-2001; 2001WO-US004273
                                                                                                                                                                                                                                                                                                                                                                     ABK00063 standard; RNA; 17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    RIBOZYME PHARM INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                               (first entry)
                                                                                                                                                                                    Local Similarity 89.5
nes 17; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Blatt L, Mcswiggen J,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CHOWRIRA B M.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        MCSWIGGEN J.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                WPI; 2001-607195/69:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     BLATT L.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 WO200159103-A2.
                                                                                                                                                                                                                                                                                                                                                                                                                                             12-MAR-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     16-AUG-2001.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Synthetic.
                                                                                                                                                                                                                                                                              61
                                                                                                                                                                                                                                                                                                                                                                                                           ABK00063;
                                                                                                                                                                 Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    RIBO-)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        (MCSM/)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CHOM/)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     (BLAT/)
                                                                                                                                                                                                       Matches
   888888888
                                                                                                                                                                                                                                         ŝ
                                                                                                                                                                                                                                                                          ద
```

```
CC nucleic acids may be enzymatic nucleic acids (e.g. a ribozyme or a DNAzyme) an Inozyme (an endolytic nucleic acid cleaving a an RNA molecule possessing an NCH mocif), a G-cleaver (cleaving RNA with an NGN triplet), a zinzyme (cleaving RNA with a YGY motif). The CD20-targetting nucleic acid is used to cleave RNA of CC of CD20 in the presence of a divalent cation that is preferably MG<sup>2</sup>+.

CC FUTCHORNOWING THE CD20-targetting nucleic acid with the level of CD20. The treatment may further comptise the use of one or more conformed in particular, the CD20 targetting nucleic acid may be used to treat lymphoma, leukaemia, B-cell lymphoma, low-grade or follicular nonconformed in a particular, because of follicular nonconformed in a particular, which is lymphocytic lymphoma, low-grade or follicular nonconformed in a limin immunodeficiency virus) associated NHL, mantle-cell lymphoma (MCL), immunocytopaenia, modifiammatory arthropathy. The NGGO-ct targetting nucleic acid is used to cleavably MG<sup>2</sup>+. Furthermore, the nucleic acid may be contacted with a cell to reduce NGGO activity of the presence of a divalent cation that is preferably MG<sup>2</sup>+. Furthermore, the coll and treat a particular, the NGGO-targetting nucleic acid may be used to therapies. In particular, the NGGO-targetting nucleic acid may further comprise the use of one or more thear central nervous system (CNS) injury and cerebrooascular a central nervous system (CNS) injury and cerebrooascular acident (CNA, stroke), Altheimer's disease, dementia, multiple sclerosis (ANS), chemotherapy-induced neuropathy, amyotrophic lateral sclerosis (ANS), chemotherapy-induced neuropathy, amyotrophic lateral sclerosis (ANS), parkins or sacuscular dystrophy, and/or other neurodegenerative disease, stacks which respond to the modulation of NGGO expression. The present construction of the invention of the nord neuropathy.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ô
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Human; 88; antisense therapy; cytostatic; antiinflammatory; haemostatic; cerebroprotective; anotropic; neuroprotective; antiparkinsonian; muscular; CD20; neurice growth inhibitor gene; NOG0; hammerhead ribozyme; DNAzyme; inozyme; G-cleaver; amberzyme; ainzyme; I-puphoma; I-p
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Creutzfeldt-Jakob disease; muscular dystrophy; neurodegenerative disease.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Score 15.4; DB 1; Length 17; Pred. No. 3.4e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Sequence 17 BP; 5 A; 6 C; 3 G; 0 T; 3 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1593
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              RESULT 509
ABK00962/c
ID ABK00962 standard; RNA; 17 BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           0.3%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             09-FEB-2001; 2001WO-US004273.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 11-FEB-2000; 2000US-0181797P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1577 TTTCTGCAGATGAGCGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   17 TTTCTGCAGAGGAGCGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       12-MAR-2002 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Best Local Similarity 94.1
Matches 16; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Human NOGO Inozyme #232.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   WO200159103-A2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      16-AUG-2001.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ABK00962;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Homo
                  88888888888888888888888888888888888
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  g
```

```
The invention relates to a nucleic acid molecule which down expression of a CD20 gene and a nucleic acid molecule which down expression of a neurite growth inhibitor gene (NGO). The regulates expression of a neurite growth inhibitor gene (NGO). The mucleic acids may be enzymatic nucleic acids (e.g. a ribozyme or a nucleic acids and NR motif) proposessing an INCH motif), a G-cleaver (cleaving RNA with a NRN motif) proposessing an NCH motif), a G-cleaver (cleaving RNA with a NRN motif) and motification and cleaving RNA with a NRN motif) and amberzyme (cleaving RNA with a NRN motif) and contacted with a call to reduce CD20 acid is used to cleave RNA with a YGY motif). The CD20-targetting nucleic acid is used to cleave RNA cof CD20 in the presence of a divalent cation that is preferably MG<sup>2</sup> +. CC Treat in particular, the CD20 targetting nucleic acid may be used to treat in particular, the CD20 targetting nucleic acid may be used to treat in particular, B-call lymphoma, low-grade or follicular ND1. Immunocytoma (NRL), bulky low-grade or follicular ND20 targetting nucleic acid may be used to cleave RNA of the NOGO gene in the treatment and inflammatory arthropathy. The NOGO gene in the treatment and further comprise the use of one or more coll may be contacted with a cell to reduce NOGO gene in the creatment may further comprise the use of one or more coll may be contacted with a cell to reduce NOGO gene in the creat a patient having a condition associated with the level of NOGO. The treatment may further comprise the use of one or more coll may be contacted with a cell to reduce NOGO gene in the creat central nervous system (CNS) injury and creaborovascular accident creatment may further comprise the use of one or more create central nervous system (CNS) injury and creaborovascular accident creatment and sisease, ataxia, Huntington's disease, created neuropathy, amyotrophic lateral accentral pervous system (NNS) indured some construction of sisease, muscular dystrophy and coherapy-induced neuropathy, amyotrophic s
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Human; ss; antisense therapy; cytostatic; antiinflammatory; haemostatic;
                                                                                                                                                                                                                                                                Nucleic acid molecules, e.g., enzymatic nucleic acids and antisense constructs, which down regulate expression of a CD20 gene or neurite growth inhibitor gene useful for treating, e.g., lymphoma, leukemia, and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Score 15.4; DB 1; Length 17; Pred. No. 3.4e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Sequence 17 BP; 4 A; 6 C; 3 G; 0 T; 4 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      sequence is an inozyme of the invention
                                                                                                                                                                                Chowrira BM;
                                                                                                                                                                                                                                                                                                                                                                                 Claim 88; Page 81; 200pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1579 TCTGCAGATGAGCGTAT 1595
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ABK00963 standard; RNA; 17 BP.
                                                                                                                                                                                                                                                                                                                                         central nervous system injury.
28-FEB-2000; 2000US-0185516P. 06-MAR-2000; 2000US-0187128P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Query Match 0.3%;
Best Local Similarity 94.1%;
Matches 16; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  17 TCTGCAGAGGAGCGTAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      12-MAR-2002 (first entry)
                                                                    RIBOZYME PHARM INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Human NOGO Inozyme #233.
                                                                                                                                                                                Blatt L, Mcswiggen J,
                                                                                         BLATT L.
MCSWIGGEN J.
CHOWRIRA B M.
                                                                                                                                                                                                                             WPI; 2001-607195/69
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ABK00963;
                                                                                                                   (MCSW/)
                                                                         (RIBO-)
                                                                                           (BLAT/)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       RESULT 510
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ABK00963
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      #X#X#X#X
```

muscular, CD20; neurite growth inhibitor gene; NOGO; hammerhead ribozyme; muscular; CD20; neurite growth inhibitor gene; NOGO; hammerhead ribozyme; DNAzyme; inozyme; G-cleaver; amberzyme; zinzyme; lymphoma; leukaemia; B-cell lymphoma; non-Hodgkin's lymphoma; NHL; lymphocytic leukaemia; M-cell lymphoma; NHL; lymphocytic leukaemia; MCL; immunocytoma; IMC; jamune thrombocytopaenia; stroke; dementia; inflammatory arthropathy; central nervous system injury; cerebrovascular accident; CVA; Alzabeimer's disease; multiple sclerosis; chemotherapy-induced neuropathy; amyotrophic lateral sclerosis; ALS; parkinson's disease; Ataxia; Huntington's disease; Creutzfeldt-Jakob disease; muscular dystrophy; neurodegenerative disease. cerebroprotective; nootropic; neuroprotective; antiparkinsonian; Chowrira BM; 28-FEB-2000; 2000US-0185516P. 06-MAR-2000; 2000US-0187128P. 09-FEB-2001; 2001WO-US004273 11-FEB-2000; 2000US-0181797P RIBOZYME PHARM INC. Mcswiggen J, CHOWRIRA B M. WPI; 2001-607195/69. BLATT L. MCSWIGGEN J. WO200159103-A2. sapiens. 16-AUG-2001 Synthetic. Blatt L, (RIBO-) (BLAT/) (CHOM/) (MCSM/) Homo

Nucleic acid molecules, e.g., enzymatic nucleic acids and antisense constructs, which down regulate expression of a CD20 gene or neurite growth inhibitor gene useful for treating, e.g., lymphoma, leukemia, and central nervous system injury. 

Claim 88; Page 81; 200pp; English.

sequence is an inozyme of the invention

ဇ္ဗ

ઠે 셤

```
The present invention relates to murine oligonucleotides (ACC62754-ACC68806), which are associated with tumour suppression, tumour reversion, apoptosis and virus resistance. The oligonucleotides are useful as (1) as probes and primers for detecting, identifying, quantifying and/or amplifying nucleic acid, e.g. as one component of a gene chip, in virco as (anti) sense reagents; and (2) for production of recombinant polypeptides. The oligonucleotides are useful for preparation of pharmaceuticals for prevention and/or treatment of viral diseases that are characterised by development of tumours or cell degeneration, specifically cancer but also Alzheimer's disease and schizophrenia
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           New isolated nucleic acid, useful for treating viral diseases associated with tumors and cell degeneration, also related polypeptides, antibodies and transfected cells.
                                                                                                                                                       Cytostatic; virucide; neuroprotective; nootropic; neuroleptic; murine; tumour suppressabion; tumour reversion; apoptosis; virus resistance; viral disease; tumour; cell degeneration; cancer; Alzheimer's disease; schizophrenia; se.
                                                                                                              Murine oligonucleotide associated with tumour supression, SEQ ID 2382
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Disclosure; Page 309; 738pp; French.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Tuijnder M;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            (MOLE-) MOLECULAR ENGINES LAB.
                                                                                                                                                                                                                                                                                                                                                                                                    17-SEP-2002; 2002WO-IB004210
                                                                                                                                                                                                                                                                                                                                                                                                                                                17-SEP-2001; 2001FR-00011979
                                                                  01-JUL-2003 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Amson R,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           (revised)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   WPI; 2003-333167/31.
                                                                                                                                                                                                                                                                                                               WO2003025176-A2.
                                                                                                                                                                                                                                                                      fus musculus.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Telerman A,
                                                                                                                                                                                                                                                                                                                                                           27-MAR-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           18-DEC-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                04-DEC-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ADB39787;
                           ACC65135;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        RESULT 513
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ADB39787/
      셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ઠ
                                                                                         ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ACC68806), which are associated with tumour suppression, tumour teveration, apoptocasts and virus resistence. The oligonucleotides are useful as (1) as probes and primers for detecting, identifying, quantifying and/or amplifying nucleic acid, e.g. as one component of a gene chip, in virto as (anti) sense reagents; and (2) for production of recombinant polypeptides. The oligonucleotides are useful for preparation of pharmaceuticals for prevention and/or treatment of viral diseases that
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   New isolated nucleic acid, useful for treating viral diseases associated with tumors and cell degeneration, also related polypeptides, antibodies and transfected cells.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                Cytostatic; virucide; neuroprotective; nootropic; neuroleptic; murine; tumour suppression; tumour reversion; apoptosis; virus resistance; viral disease; tumour; cell degeneration; cancer; Alzheimer's disease;
                                                                                                                                                                                                                                                                                                                                                                                                                       Murine oligonucleotide associated with tumour supression, SEQ ID 5330.
                                                                                         Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           present invention relates to murine oligonucleotides (ACC62754-
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             specifically cancer but also Alzheimer's disease and schizophrenia
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        degeneration
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ;
0
                                                                                         ö
                                           Score 15.4; DB 1; Length 17;
Pred. No. 3.4e+02;
0; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             0.3%; Score 15.4; DB 1; Length 17; 94.1%; Pred. No. 3.4e+02; tive 0; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        of tumours or cell
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Sequence 17 BP; 3 A; 3 C; 7 G; 4 T; 0 U; 0 Other;
Sequence 17 BP; 4 A; 6 C; 3 G; 0 T; 4 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Disclosure; Page 654; 738pp; French.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Tuijnder M;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        development
                                                                                                                                1578 TTCTGCAGATGAGCGTA 1594
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     960 GATCCTGACAGCTGTGG 976
                                                                                                                                                                                                                                                                                           品
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     (MOLE-) MOLECULAR ENGINES LAB
                                         0.3%;
                                                                                                                                                              TTCTGCAGAGGAGCGTA 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           17-SEP-2001; 2001FR-00011979.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  17-SEP-2002; 2002WO-IB004210
                                                                                                                                                                                                                                                                                        ACC68083 standard; DNA; 17
                                                                                                                                                                                                                                                                                                                                                                             (first entry)
                                                                Local Similarity 94.1
169 16; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             16; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Telerman A, Amson R,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        characterised by
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            WPI; 2003-333167/31.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        schizophrenia; ss
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           WO2003025176-A2.
                                                                                                                                                                                                                                                                                                                                                                             01-JUL-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Mus musculus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      27-MAR-2003
                                                                                                                                                                            17
                                                                                                                                                                                                                                                                                                                                  ACC68083;
                                           Query Match
                                                                                                                                                                                                                                             RESULT 511
                                                                                         Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Matches
                                                                                                                                                                                                                                                               ACC68083
ID ACC
```

```
ö
                                                                                                                                                                                                                                                                                                                                 cytostatic, antiviral, neuroprotective, nootropic, neuroleptic, 88, primer, probe, tumour suppression, tumour reversion, apoptosis, virus resistance, transgenic animals, Alzheimer's disease, schizophrenia,
                                                           Gape
                                                           ö
                         Score 15.4; DB 1; Length 17;
Pred. No. 3.4e+02;
0; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                      Tumour suppression/reversion associated nucleotide #110.
Sequence 17 BP; 4 A; 3 C; 1 G; 9 T; 0 U; 0 Other;
                                                                                        1417
                                                                                                                                                                                                뮵
                          Query Match
Best Local Similarity 94.1%;
Matches 16; Conservative
                                                                                        1401 AAATAAAATTGAAGATC
                                                                                                                  17 AAATAGAATTGAAGATC
                                                                                                                                                                                              ADB39787 standard; DNA; 17
                                                                                                                                                                                                                                                                      (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                              Ното варіелв.
                                                                                                                                                                                                                                                                                                                                                                             diagnosis
```

RESULT 512 ACC65135/c ID ACC65135 standard; DNA; 17 BP.

GATCCTGAGAGCTGTGG 17

셤 ઠે

```
15-MAY-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ADR05333;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   RESULT 515
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ADR05333,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ઠે
                                                                                                                                                                                                                                                                    The invention relates to the isolation of 6327 mucleotide sequences, fragments of at least 15 consecutive mucleotides of these nucleotides, a sequence having at least 80% identity, after optimal alignment, with the concertion of the nucleotides, or the complement, or corresponding RNA, of the nucleotides. The nucleotides are used as probes or primers for detecting, dentifying, quantifying and/or amplifying nucleic acids, as in vitro sense and antisense sequences, of nucleotides involved in tumour suppression or reversion, apoptosis and or viral resistance, to produce recombinant polypoptides, and to prepare transgenic animals, as experimental models. The nucleotides (also vectors containing them and cells containing the vectors), the encoded polypoptides and antibodies (b) against the polypoptide are useful for prevention and/or treatment of viral infections or diseases characterized by development of tumours or cell degeneration (e.g. Alzheimer's disease or schizophrenia).

Challysis of the expression of the nucleotides can be used for diagnosis and or prevention and containing the containing the vectors or all degeneration (e.g. Alzheimer's disease or schizophrenia).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               primer; probe; tumour suppression; tumour reversion; apoptosis;
virus resistance; transgenic animals; Alzheimer's disease; schizophrenia;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               and/or prognosis of these diseases. The nucleotides and polypeptides can also be used to screen for their specific interactive molecules, potentially useful for treating diseases associated with abnormal
                                                                                                                                                                                          New nucleic acid encoding human prostate membrane-specific antigen, useful e.g. for treatment of tumors and viral infection, also related polypeptide and antibodies.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   cytostatic; antiviral; neuroprotective; nootropic; neuroleptic; ss;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ô
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        0.3%; Score 15.4; DB 1; Length 17; 94.1%; Pred. No. 3.4e+02; tive 0; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Tumour suppression/reversion associated nucleotide #3120.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sequence 17 BP; 9 A; 2 C; 3 G; 3 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                     Disclosure; Page 45; 771pp; French.
                                                                                                                                                Tuijnder M;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1332 TGTACCATTATTTGATC 1348
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            expression of the nucleotides.
                                                                                                                        (MOLE-) MOLECULAR ENGINES LAB
                                                                     17-SEP-2002; 2002WO-IB004219.
                                                                                             17-SEP-2001; 2001FR-00011981.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ADB42797 standard; DNA; 17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         (revised)
(first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        16; Conservative
                                                                                                                                                  relerman A, Amson R,
                                                                                                                                                                          WPI; 2003-441574/41.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 WO2003040369-A2.
                    WO2003040369-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Homo sapiens,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          18-DEC-2003
04-DEC-2003
                                            15-MAY-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 diagnosis.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ADB42797;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              RESULT 514
ADB42797
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           g
```

```
The invention relates to the isolation of 6327 nucleotide sequences, cragments of at least 15 consecutive nucleotides of these nucleotides, a sequence having at least 80% identity, after optimal alignment, with the sequence having at least 80% identity, atter optimal alignment, with the uncleotides or sequence that hybridizes under stringent conditions with the nucleotides or the complement, or corresponding RNA, of the cursion or the nucleotides are used as probes or primers for detecting, identifying, quantifying and/or amplifying nucleotides as in vitro sense and antisense sequences, of nucleotides involved in tumour suppression or reversion, apoptosis and or viral resistance, to produce complemental models. The nucleotides (also vectors containing them and experimental models. The nucleotides (also vectors containing the vectors), the encoded polypeptides and antibodies calls containing the vectors), the encoded polypeptides and antibodies or viral infections or diseases characterized by development of tumours or call degeneration (e.g. Alzheimer's disease or schizophrenia).

Or call degeneration (e.g. Alzheimer's disease or schizophrenia).

Analysis of these diseases. The nucleotides and polypeptides can also be used to screen for their specific interactive molecules, the nucleotides and polypeptides can be used to forteen for their specific interactive molecules.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  reproductive maturation regulator; imago; diapause inducer; diapause inhibitor; larva; transformation regulator; pupa; juvenile hormone acid transmethylase; silkworm; Bombyy, mori) brosophila melanogaster; mosquito; Anopheles gambia; Spodoptera litura; Helicoverpa armigera; molting; transformation; diapause; blastogenesis; polymorphism; arthropod; cotton bollworm; PCR primer.
                                                                                                                                                                                                                                                                                                                                                           New nucleic acid encoding human prostate membrane-specific antigen, useful e.g. for treatment of tumors and viral infection, also related polypeptide and antibodies.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Silkworm juvenile hormone acid transmethylase cDNA PCR primer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     0.3%; Score 15.4; DB 1; Length 17; 94.1%; Pred. No. 3.4e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Sequence 17 BP; 7 A; 4 C; 2 G; 4 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         primer; insect repellent; insect attractant;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Disclosure; Page 396; 771pp; French.
                                                                                                                                                                                                                                   Tuijnder M;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      3061 GATCTTGTTAAAACCAA 3077
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         GATCTTGTCAAAACCAA 17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    expression of the nucleotides.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        BP
                                                                                                                                                    (MOLE-) MOLECULAR ENGINES LAB
17-SEP-2002; 2002WO-IB004219.
                                                                              17-SEP-2001; 2001FR-00011981.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Best Local Similarity 94.1%;
Matches 16; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ADR05333 standard; DNA; 17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     (first entry)
                                                                                                                                                                                                                                       Amson R,
                                                                                                                                                                                                                                                                                                         WPI; 2003-441574/41.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           WO2004065604-A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     21-OCT-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Bombyx mori.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     05-AUG-2004.
                                                                                                                                                                                                                                           Telerman A,
```

```
The invention relates to a DNA (I) encoding a protein (II) having juvenile-hormone acid transmethylase activity selected from the DNA from silkworm (Bennbyx mori), Drosophila melanogaster, mosquito (Anophelas gambiae), Spodoptera litura and Helicoverpa armigera, their encoded proteins (S2), DNAs (D2) that hybridize under stringent conditions with the nucleic acids or an amino acid sequence (S3) comprising any one of (S2) in which one or more amino acids are substituted, deleted, inserted and/or added. (I) is useful for screening a compound that controls the expression level of (I), and as a controlling agent of molting and transformation, reproductive, diapause, blastogenesis, action, polymorphism or lifetime of arthropod. (II) is useful for screening a compound having binding affinity with respect to (II), which involves contacting test compound that controls the binding of (II) which involves useful for screening a compound that controls the activity of involves contacting test compound with (II), measuring the activity of (II), and selecting the compound that controls the activity of (II), and selecting test compound that controls the activity of (II), and selecting test compound that decreases the activity of (II), and selecting the compound that decreases the activity of (II), and selecting the compound that decreases or increases the activity of (II), and selecting the compound that decreases or increases.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     of (II), based on comparison of the activity of (II) in absence of test compound. (II) is useful for manufacturing activated juvenile hormone. This sequence corresponds to a PCR primer used to amplify and isolate the transmethylase cDNA from the silkworm Bombyx mori.
                                                                                                                                                                                                                                                                                                           New DNA encoding protein having juvenile-hormone acid transmethylase activity, useful for screening for a compound controlling the expression level of juvenile-hormone acid transmethylase DNA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Sequence 17 BP; 0 A; 1 C; 1 G; 15 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                           Example 1; SEQ ID NO 11; 118pp; Japanese.
                                                                                                                                            (NAAG-) NAT AGRIC RES ORG JAPAN
                                                                                     20-JAN-2003; 2003WO-JP000415.
                           20-JAN-2003; 2003WO-JP000415
                                                                                                                                                                                                      Itoyama K,
                                                                                                                                                                                                                                                             WPI; 2004-580727/56.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Query Match
X#X#X#X#X#X####XXXX####XXXXXX
```

```
ö
                                ö
0.3%; Score 15.4; DB 1; Length 17; 94.1%; Pred. No. 3.4e+02; ve 0; Mismatches 1; Indels
             94.18;
             Local Similarity 94.1
les 16; Conservative
                Best Loca
Matches
```

Procollagen I reverse transcriptase PCR primer #1. 5023 GTAAAAAAAAAAAA 5039 17 GCAAAAAAAAAAAAA 1 AAZ08552 standard; DNA; 18 (first entry) 18-OCT-1999 AAZ08552 용 ठ

Osteocalcin; osteonectin; osteopontin; bone morphogenic protein; BMP; parathyroid hormone receptor; alkaline phosphatase; procollagen; human; osteoblast precursor call; OPC; bony defect; osseous defect; traumatic bone loss; congenital insufficiency; malformation; osteoporosis; surgical resection; traumatic avulsion; PCR primer; ss. Homo sapiens Synthetic

WO9939724-A1 12-AUG-1999

Blumenfeld M, Chumakov I, Abderrahim H, Bihain B;

18-JUL-2000; 2000US-0219704P

(GEST ) GENSET

Cohen D,

```
The present invention describes composition (I) for treating osseous defects comprising a porcus matrix and a cell that is committed to an osteogenic lineage. The composition is useful for healing a bone defects, especially those caused by osteoporosis, cyst like cavities, surgical resection, traumatic avulsion and congenital insufficiency. The compositions assist in the repair and regeneration of bone. Osteoblast precursor cells (Opc's) boost bone making capability of an ill or aged individual where Opc's are numerically deficient or functionally impaired. Opc's can be administered to express BMP to repair bone defects. The implant is useful for promoting vascular ingrowth and bone commation, especially in treating bone defects e.g. osteopenic spine. The composition promotes vascular ingrowth and bone formation. Opc's can be composition promotes vascular ingrowth and bone formation. Opc's can be composition promotes vascular ingrowth and bone formation in the composition abarrier to the progression of bone formation in the general manual they also encourage additional bone formation in the cuspension and they also encourage additional bone formation in the cuspension and they also encourage additional bone formation in the cuspension and they also encourage additional bone formation in the cuspension and they also encourage additional bone formation in the cuspension and they also encourage additional bone formation in the cuspension and they also encourage formation in the cuspension and they also encourage for procollagen I expression
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Human; obesity associated-biallelic marker; chromosome 10; obesity; ss; drug response; hyperuricaemia; digestive pathology; hypertension; cancer; hepatic function disorder; cardiovascular disease; hyperlipidaemia; PCR; insulin disorder; atheromatous disease; cardiac insufficiency; primer.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Gарв
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Human obesity-associated biallelic marker upstream PCR primer #151.
                                                                                                                                                                                                                                     Composition for treating osseous defects e.g. traumatic bone loss, congenital insufficiency and/or malformations.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Score 15.4; DB 1; Length 18; Pred. No. 3.4e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Sequence 18 BP; 7 A; 4 C; 5 G; 2 T; 0 U; 0 Other;
                                                                                                                                                    Wong SC;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             0; Mismatches
                                                                                                                                                    Frank E,
                                                                                                                                                                                                                                                                                                      Example 2; Page 23; 81pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1912
                                                                                                       (UYOR-) UNIV.OREGON HEALTH SCI
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ВР.
  99WO-US002946.
                                                                 98US-0074451P.
                                          98US-0074240P
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          28-JUN-2001; 2001WO-IB001477
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Query Match 0.3%;
Best Local Similarity 94.1%;
Matches 16; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              17 AGTTCTTGGTCTCGTCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1896 AGTICTTGCTCGTCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ABK41074 standard; DNA; 18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               21-MAY-2002 (first entry)
                                                                                                                                                  Winn SR,
                                                                                                                                                                                            WPI; 1999-494212/41
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       WO200206525-A2
                                                                                                                                                  Hollinger JO,
  10-FEB-1999;
                                          10-FEB-1998;
                                                                 12-FEB-1998;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  24-JAN-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ABK41074;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  RESULT 517
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ABK41074
ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Q
```

```
PCR primers ABZ77709-10 used in a nested PCR reaction to amplify fragments of the K1 gene of Kaposi's sarcoma herpesvirus (KSHV). This
                                                                                                                                                                                                                                                                                                                     PCR primer used to amplify a fragment of the K1 gene of KSHV.
                                                                                                                                                                            Sequence 18 BP; 3 A; 6 C; 2 G; 7 T; 0 U; 0 Other;
                                                        Example 2; Page 258; 311pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Example 2; Page 34; 58pp; English
                                                                                                                                                                                                                         4144 CACCCTCTGTATCAGTC 4160
                                                                                                                                                                                                                                 CACCCTTTGTATCAGTC 18
                                                                                                                                                                                                                                                                           ABZ77709 standard; DNA; 18 BP
                                                                                                                                                                                                                                                                                                                                                           Kaposi's sarcoma herpesvirus.
                                                                                                                                                                                                                                                                                                                                                                                                        05-AUG-2002; 2002WO-GB003594
                                                                                                                                                                                                                                                                                                                                                                                                                       03-AUG-2001; 2001GB-00019038
                                                                                                                                                                                                                                                                                                                                                                                                                                      (UNIC ) UNIV COLLEGE LONDON
                                                                                                                                                                                                                                                                                                         (first entry)
                                                                                                                                                                                                 Local Similarity 94.1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      herpesvirus infection
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  WPI; 2003-289909/28
     WPI; 2002-155043/20
                                                                                                                                                                                                                                                                                                                                                                           WO2003014154-A2
                                                                                                                                                                                                                                                                                                         17-JUN-2003
                                                                                                                                                                                                                                                                                                                                                                                          20-FEB-2003
                                                                                                                                                                                                                                                                                                                                               primer; ss
                                                                                                                                                                                                                                                                                                                                                                                                                                                     Boshoff C;
                                                                                                                                                                                                                                        N
                                                                                                                                                                                                                                                                                           ABZ77709;
                                                                                                                                                                                            Query Match
                                                                                                                                                                                                                                                                RESULT 518
                                                                                                                                                                                                           Matches
                                                                                                                                                                                                                                                                              엄
ઠ
```

0; Mismatches

0.3%;

```
artery
gene encodes an antigenic polypeptide, which is used to derive formulae for KSHV epitopes that are recognised by CD8 T cells. Polypeptides comprising the epitope are useful for producing a vaccine against KSHV. They are also useful for stimulating dendritic cells or T lymphocytes ex
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 cytostatic; anticonvulsant; nootropic; muscula; anti-HIV; RNA interference; iRNA; antisense technology; lipid metabolism; cholesterol imbalance; dyslipidaemia hypercholesterolaemia; coronary artery disease; CAD; coronary heart disease; CHD; atherosclerosis; hepatic glucose production; glucose-metabolism-related disorder; diabetes; cancer; breast cancer; spinoce-metabolism-related disorder; diabetes; cancer; breast cancer; spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;
                                                                                                                                                                                                        Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Interference RNA agent useful for treating dyslipidemias, coronary disease, diabetes, cancer or neurological disease, comprises sense sequence and antisense sequence which has specific modifications.
                                                                                                                                                                                                        ;
0
                                                                                                                                                                  Length 18;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Human apolipoprotein B (ApoB) oligonucleotide segid 1061.
                                                                                                                                                                                                        1; Indels
                                                                                                                        Sequence 18 BP; 3 A; 5 C; 5 G; 5 T; 0 U; 0 Other;
                                                                                                                                                                  0.3%; Score 15.4; DB 1;
94.1%; Pred. No. 3.4e+02;
                                                                                                                                                                                                          0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Example 5; SEQ ID NO 1061; 378pp; English
                                                                                                                                                                                                                                                     1955 TTCTGCCAGGCATAGCC 1971
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 2003US-04526B2P.
2003US-045465P.
2003US-0454962P.
2003US-0455050P.
2003US-0462B94P.
2003US-0462B94P.
2003US-0465B02P.
2003US-046942P.
2003US-0469412P.
2003US-0469412P.
2003US-04939B6P.
2003US-04939B6P.
2003US-049459P.
2003US-051034BP.
2003US-051034BP.
                                                                                                                                                                                                                                                                                                                                                                                              BP.
                                                                                                                                                                                                                                                                                         rrcreccaeccaraere 18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               08-MAR-2004; 2004WO-US007070
                                                                                                                                                                                       Best Local Similarity 94.1%;
Matches 16; Conservative
                                                                                                                                                                                                                                                                                                                                                                                              ADR76576 standard; DNA; 19
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Bumcrot D;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  (ALNY-) ALNYLAM PHARM.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              WPI; 2004-677362/66.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   WO2004080406-A2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          12-MAR-2003; 2
13-MAR-2003; 2
13-MAR-2003; 2
14-APR-2003; 2
17-APR-2003; 2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                25-APR-2003;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                25-APR-2003;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              11-AUG-2003;
26-SEP-2003;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            07-NOV-2003;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Manoharan M,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           08-AUG-2003;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           10-OCT-2003;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      09-OCT-2003;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           23-SEP-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            16-DEC-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                        ADR76576;
                                                                                                                                                                           Query Match
                                                                                                                                                                                                                                                                                                                                                        RESULT 519
ADR76576
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Homo
                                                                                                                                                                                                                                                                                                                                                                                                                   8
                                                                                                                                                                                                                                                                                             셤
                                                                                                                                                                                                                                                         à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ö
                                                                                                                                                                                                            The invention relates to a set of novel map-related biallelic markers, preferably located on obesity disorder-associated chromosomal regions on chromosomes 3, 10 and 19. The markers are useful for genotyping or estimating the frequency of an allele in a population, for detecting an association between a genotype or haplotype and a phenotype, e.g. a disease involving drug responses, obssity or disorders related to obseity, such as hyperuricaemia, digestive pathology, hepatic function disorders, cancer, cardiovascular disease, hypertenation, hyperlipidaemia, insulin disorders, atheromatous disease and cardiac insufficiency. The markers are useful for detecting a statistical correlation between a biallelic marker allele and a phenotype and/or between a biallelic marker haplotype and a phenotype and/or between a biallelic marker haplotype and a phenotype and marker
                                                             Set of novel map-related biallelic markers, preferably located on obesity disorder-associated chromosomal regions on chromosomes 3, 10 and 19, useful, for e.g. detecting statistical correlations between marker allele and a phenotype.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             New polypeptides and expression vectors with an epitope sequence recognized by a CD8 T cell, useful in the manufacture of a vaccine for the prophylactic and/or therapeutic treatment of Kaposi's sarcoma
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Epitope; KSHV; CD8 T cell; vaccine; dendritic cell; T lymphocyte; PCR;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        .
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Score 15.4; DB 1; Length 18; Pred. No. 3.4e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1; Indels
```

2003US-0465665P 2003US-0465802P

25-APR-2003; 25-APR-2003;

```
comportance and an antisense sequence, where the sense sequences have one or more asymmetrical 2'-O alkyl modifications, the antisense cone or more asymmetrical phosphorothioate modifications and the antisense sequence targets a human gene sequence. Also described and the antisense sequence targets a human gene sequence. Also described are: a pharmaceutical preparation comprising (1); reducing (M1) apos-100 levels or glucose-6-phosphatase levels in a subject; producing (I); stabilising (I), involves selecting a sequence with activity and introducing one or more asymmetrical modification in the sequence, where the modification decreasing (I) in security; a kit comprising (I) and instruction for its use; and a device the modification decreases nuclease sensitivity while not decreasing its activity; a kit comprising (I) and instruction for its use; and a device that can be dispense or administer a composition comprising (I). (I) is useful for reducing apos-100 levels or glucose-6-phosphatase levels.

The subject is suffering from a disorder characterised by elevated or otherwise unwanted expression of apos-100, elevated or otherwise unwanted disorder is cholesterol, and/or disregulation of lipid metabolism. The disorder is chosen from the HDL/LDL cholesterol imbalance, dyslipidaemias, hypercholesterolaemia, coronary attery disease (CMD), coronary heart. Chesterolaemia, coronary attery disease (CMD), coronary heart confliction of figuences production or for treating the diseases as mentioned above, cancer (e.g. breast, colon or treating the diseases as mentioned above, cancer (e.g. breast, colon or columnation benefit attack) in uncological disease (e.g., Huntington disease or septemberlae attack) or viral disease (e.g., AlDS). This sequence represents a human apolipoprotein B (Apos) antisense oligonucleotide that control Apos gene expression.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ö
  describes a RNA interference (iRNA) agent (I) comprising a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic; cytostatic; anticonvulsant; nootropic; muscula; anti-HIV; RNA interference; iRNA; antisense technology; lipid metabolism; cholesterol imbalance; dyslipidaemia hypercholesterolaemia; coronary artery disease; CAD; coronary heart disease; CHD; atherosclerosis; hepatic glucose production; glucose-metabolism-related disorder; disease; cancer; breast cancer; ollon cancer; lung cancer; neurological disease; Huntington disease; spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    0.3%; Score 15.4; DB\text{19}; Length 19; 44.1%; Pred. No. 3.5e+02; ve 0; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Human apolipoprotein B (ApoB) oligonucleotide segid 4012.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sequence 19 BP; 6 A; 6 C; 4 G; 3 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               541 CTAAAGACCACAGAGGT 557
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            crcaacaccacagager 19
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ADR79520 standard; DNA; 19 BP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             13 - MAR - 2003) 2003US - 0454265P.
13 - WAR - 2003) 2003US - 0454962P.
13 - WAR - 2003; 2003US - 0455050P.
14 - APR - 2003; 2003US - 0462894P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           08-MAR-2004; 2004WO-US007070
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     94.1%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 16-DEC-2004 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Query Match
Best Local Similarity 94.1
Matches 16; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           #02004080406-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              23-SEP-2004.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            m
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ADR79520;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   RESULT 520
ઠ
```

```
The invention describes a kna interference (ikkna) agent (i) comprising a sequence and an antisense sequence, where the sense sequences have one or more asymmetrical phosphorothicate modifications and the antisense sequence targets a human gene sequence. Also described are: a pharmaceutical preparation comprising (I); reducing (MI) apo8-100 (I) sequence are a pharmaceutical preparation comprising (I); reducing (MI) apo8-100 (I) stabilising (I); involves selecting a sequence with activity and introducing one or more asymmetrical modification in the sequence, where the modification decreases nuclease sensitivity while not decreasing its activity; a kit comprising (I) and instruction for its use; and a device that can be dispense or administer a composition comprising (I). (I) is useful for reducing apo8-100 levels or glucose-6-phosphatase levels. (MI) useful for reducing apo8-100 levels or glucose-6-phosphatase levels. (The subject is suffering from a disorder characterised by elevated or otherwise unwanted expression of apo8-100, elevated or otherwise unwanted correlation of dispense or coronary artery disease (CHD) and atheresoral or for treating glucose-metabolism. The disease (CHD) and atheresoral or for treating glucose-metabolism. The calted disorder e.g. diabetes or type-2 diabetes. (I) is useful for related disorder e.g. diabetes or type-2 diabetes. (I) is useful for treating the diseases as mentioned above, cancer (e.g., breast, colon or correasing the diseases as mentioned above, cancer (e.g., breast, colon or corpused and disease (e.g., AlDS). This sequence or control dispense or viral disease (e.g., AlDS). This sequence or control denoted to control denoted or control deno
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ö
                                                                                                                                                                                                                                                                                                                                                                                                         Interference RNA agent useful for treating dyslipidemias, coronary artery disease, diabetes, cancer or neurological disease, comprises sense sequence and antisense sequence which has specific modifications.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 The invention describes a RNA interference (IRNA) agent (I) comprising
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Сарв
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          0.3%; Score 15.4; DB 1; Length 19; 94.1%; Pred. No. 3.5e+02; ive 0; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Sequence 19 BP; 6 A; 6 C; 4 G; 3 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  can be used to control ApoB gene expression.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Example 5; SEQ ID NO 4012; 378pp; English
                                                              09-MAY-2003; 2003US-0469612P.

08-AUG-2003; 2003US-049386P.

11-AUG-2003; 2003US-0494697P.

26-SEP-2003; 2003US-0510341P.

09-CCT-2003; 2003US-0510346P.

10-CCT-2003; 2003US-0510318P.

07-NOV-2003; 2003US-0510318P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            557
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            541 CTAAAGACCACAGAGGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AAQ75326 standard; DNA; 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         3 crcaagaccacagaggr
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Query Match 0.3'
Best Local Similarity 94.1'
Matches 16, Conservative
                                                                                                                                                                                                                                                                                                               Manoharan M, Bumcrot D;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Urease gene PCR primer.
                                                                                                                                                                                                                                                             (ALNY-) ALNYLAM PHARM.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 (revised)
                                                                                                                                                                                                                                                                                                                                                       WPI; 2004-677362/66.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              25-MAR-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     22-JUN-1995
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AAQ75326;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  RESULT 521
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AAQ75326/c
ଚ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 EXERKA KA
```

```
New antisense compounds targeting nucleic acids encoding human P13 kinase
p110 delta useful for treating a disease or condition associated with P13
                                                                                                   Forward primer 3F (AAT45687), which incorporates a 5' BamHI site, and reverse primer 3R (AAT45688), which carries HindIII and PstI sites, were used for the PCR amplification of a 685 bp fragment of the N-terminal portion of the urease subunit B (UreB) gene (excluding the ATG codon) of Helicobacter felis (see also AAT45680). This was used with a previously obtd. UreB fragment in pILL219 to obtain a clone capable of synthesising cloned into pMAL to allow prodon. of UreB as a maltose binding protein fusion in E. coil. UreB can be used in novel compens. for the treatment and prevention of Helicobacter infections
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      /note= "Optionally 2'-methoxyethyl (2'-MOE) nucleotides"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     nucleotides"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Phosphatidyl inositol 3 kinase; PI3K; antisense oligonucleotide; p110; catalytic subunit; treatment; rheumatoid arthritis; asthma; research; diagnostic; infection; inflammation; tumour formation; inhibitor; ss.
New immunogenic compsn. contg. UreB and HspA antigens of Helicobacter for treatment and prevention of esp. H pylori infection, also new antibodies specific for these antigens.
                                                                                                                                                                                                                                                                                                                                                                      Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Location/Qualifiers
1. .20
/*tag= a
/note= "Phosphorothioate internucleoside linkage"
                                                                                                                                                                                                                                                                                                                                                                    .;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       (2'-MOE)
                                                                                                                                                                                                                                                                                                                                  Length 20;
                                                                                                                                                                                                                                                                                                                                                                    1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               PI3K antisense inhibitor oligonucleotide ISIS# 32120.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   /mod_base= OTHER
/note= "Optionally 2'-methoxyethyl
                                                                                                                                                                                                                                                                                                  Sequence 20 BP; 8 A; 4 C; 4 G; 4 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                  Score 15.4; DB 1;
Pred. No. 3.5e+02;
0; Mismatches 1;
                                                                             Example 2; Page 116; 184pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 /*tag= c
/mod_base= OTHER
                                                                                                                                                                                                                                                                                                                                                                                                          1800 TGAAATCCTTTTGGATC 1816
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    99US-00357070.
                                                                                                                                                                                                                                                                                                                                      Query Match 0.3%;
Best Local Similarity 94.1%;
Matches 16; Conservative (
                                                                                                                                                                                                                                                                                                                                                                                                                              18 TGAAATCTTTTTGGATC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AAA13146 standard; DNA; 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         /*tag= b
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    17-JUL-2000 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             16. .20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   (ISIS-) ISIS PHARM INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Monia BP, Cowsert LM;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        WPI; 2000-282691/24.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            modified base
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               modified_base
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    19-JUL-1999;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      19-JUL-1999;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    misc_feature
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   US6046049-A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      04-APR-2000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Synthetic.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AAA13146;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AAA13146,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  RESULT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 g
                  ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ö
                                                                                                                                                                                                                                                                                                                                                                                               DNA from Helicobacter pylori and Helicobacter felis – used to develop prods. for detection, treatment and prevention of Helicobacter infection.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               The primers given in AAQ75322-27 were used in PCR-based amplification of urease-encoding nucleotide sequences of Helicobacter pylori and Helicobacter felis. (Updated on 25-MAR-2003 to correct PN field.)
                                  immunogen; vaccine; diagnostic; primer; amplification; PCR; ase chain reaction; Helicobacter pylori; Helicobacter felis; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Urease; UreB; vaccine; immunogen; antibody; chronic gastritis; ulcer; Helicobacter felis; polymerase chain reaction; PCR; primer; ds.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       0.3%; Score 15.4; DB 1; Length 20; 44.1%; Pred. No. 3.5e+02; ve 0; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Thiberge J;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Sequence 20 BP; 8 A; 4 C; 4 G; 4 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                Ferrero R, Thiberge J;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                (INSP ) INST PASTEUR.
(INRM ) INST NAT SANTE & RECH MEDICALE.
                                                                                                                                                                                                                                                                            (INSP ) INST PASTEUR.
(INRM ) INST NAT SANTE & RECH MEDICALE.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Ferrero RL,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Helicobacter UreB gene PCR primer 3F
                                                                                                                                                                                                                                                                                                                                                                                                                                                     Disclosure; Page 51; 168pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1800 TGAAATCCTTTTGGATC 1816
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   95US-00432697
95US-00447177
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               96WO-EP001834
                                                                                                                                                                                              94WO-EP001625.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Local Similarity 94.1%;
nes 16; Conservative
                                                                                                                                                                                                                               93EP-00401309
                                                                                                                                                                                                                                               93WO-EP003259
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AAT45687 standard; DNA; 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Suerbaum S,
                                                                                                                                                                                                                                                                                                                                    Labigne A, Suerbaum S,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 WPI; 1996-505900/50.
                                                                                                                                                                                                                                                                                                                                                                    WPI; 1995-006797/01.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              19-MAY-1995;
19-MAY-1995;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              WO9634624-A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             02-MAY-1996;
                                                                                                                            WO9426901-A1
                                                                                                                                                                                              19-MAY-1994;
                                                                                                                                                                                                                                 .9-MAY-1993;
                                                                                                                                                                                                                                                 19-NOV-1993;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       07-MAR-1997
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               07-NOV-1996
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Labigne A,
                                                           polymerase
                                                                                           Synthetic.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AAT45687
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Best Loca
Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  RESULT 522
```

g ઠે

```
This sequence represents a phosphatidyl inositol 3 kinase (PI3K)
targeting antisense oligonucleotide. Phosphatidyl inositol 3 kinases act
as downstream effectors of hormone and growth factor receptors, and have
been implicated in growth factor mediated cell transformation, and
mitogenesis, protein trafficking, cell. survival and proliferation, and
mitogenesis, protein trafficking, cell. survival and proliferation, and
cellular activities. PI3K is a heterodimer, consisting of a
llokD catalytic subunit (pl10), and an 85kD regulatory subunit (p85). The
invention relates to antisense oligonucleotides which target the pl10
cellular mRNA of PI3K. The antisense oligonucleotides may be used to treat
with various regions of the PI3K mRNA sequence, and inhibit the
expression of PI3K. The antisense oligonucleotides may be used to treat
cexpression of PI3K. The antisense oligonucleotides may be used to treat
a animal, particularly human, suspected of having or being prone to a
disease or condition associated with the expression of P13K. The
modulation (preferably inhibition) of the expression of P13K. The
modulation (preferably inhibition) of the expression of P13K. The
antisense oligonucleotides may also be used for research and diagnostics,
in pharmaccutical compositions and formulations, in the preparation of
kits for detecting the level of P13K in a sample, and as prophylaxis,
cell to prevent or delay infection, inflammation or tumour formation.
Antisense oligonucleotides, which are able to inhibit gene expression
specifically, are used to elucidate the function of particular genes, and
construction of partic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            A novel protein associated to hereditary spastic paraplegia used for the diagnosis of neurodegenerative conditions.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Forward primer aa2; paraplegin; human; hereditary spastic paraplegia; HSP; mutation; diagnosis; treatment; neurodegenerative condition; Amyotrophic Lateral Sclerosis; ALS; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Gaps
kinase p110 delta expression, e.g. rheumatoid arthritis, asthma
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Forward primer aa2 for amplification of paraplegin gene exon.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 0.3%; Score 15.4; DB 1; Length 20; 94.1%; Pred. No. 3.5e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Sequence 20 BP; 2 A; 8 C; 6 G; 4 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               0; Mismatches
                                                 Example 15; Col 40; 35pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              19 GAATTCGGCACGAGGGG 35
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AAZ28930 standard; DNA; 20 BP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    99WO-EP003112.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        20 GAATTCGGCACGAGCGG 4
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   98IT-MI001003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       94.1%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Local Similarity 94.1
les 16; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Casari G;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  (TELE-) FOND TELETHON
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             WPI; 2000-039065/03
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            07-FEB-2000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    06-MAY-1999;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   08-MAY-1998;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         WO9958556-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Ballabio A,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      18-NOV-1999
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Synthetic.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AAZ28930;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      pathway
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               RESULT 52
AAZ28930
8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      g
```

```
ô
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                invention, which contain a polymorphic base at position 24 of their nucleotide sequences. AAZ69579 to AAZ7740 represent amplification nucleotide sequences. AAZ69579 to AAZ7740 represent amplification primers for the ballelic markers. The biallelic markers of the invention have a variety of uses: they can be used for high density mapping of the human genome, and in complex association studies and haplotyping studies which are useful in determining the genetic basis for disease states. Compositions and methods of the invention can also be useful for the identification of the targets for the development of pharmaceutical agents and diagnostic methods, as well as the characterisation of the differential efficacious responses to and side effects from pharmaceutical agents acting on a disease as well as other treatment. B. B. The SEQ ID NOS 2852, 2913, 2974, 3055, 3096, 3157, 3227, 3297 and present invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Novel biallelic markers used to construct a high density disequilibrium
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AAZ65654 to AAZ69578 represent human biallelic markers from the present
                                     The present sequence is a forward primer aaz used for amplification and
                                                      detection of mutations in paraplegin gene exon from hereditary spastic paraplegia (HSP) patients. Detection of mutations in paraplegin gene helps in the diagnosis and treatment of various forms of HSP or other neurodegenerative conditions, such as Amyotrophic Lateral Sclerosis
                                                                                                                                                                                                                               Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Human biallelic marker upstream amplification primer SEQ ID NO:6200.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Human genome, biallelic marker; high density disequilibrium map, genomic map, haplotype; phenotype; polymorphic base; genotyping; hybridisation; identification; characterisation; amplification; single nucleotide polymorphism; SNP, PCR primer;
                                                                                                                                                                                                                               ö
                                                                                                                                                                                  0.3%; Score 15.4; DB 1; Length 20;
14.1%; Pred. No. 3.5e+02;
ve 0; Mismatches 1; Indels
                                                                                                                                                     Sequence 20 BP; 3 A; 8 C; 4 G; 5 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Chumakov I;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Claim 9; Page 1553; 2745pp; English.
                                                                                                                                                                                                                                                                 1715 CATCCTGCCTACAGACC 1731
 Claim 4; Fig 3; 53pp; English.
                                                                                                                                                                                                                                                                                                    17
                                                                                                                                                                                                                                                                                                                                                                                                AAZ71844 standard; DNA; 20 BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     98US-0082614P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  99WO-IB000822
                                                                                                                                                                                  Query Match
Best Local Similarity 94.1%;
Matches 16; Conservative
                                                                                                                                                                                                                                                                                          1 CATCCTGCCTACTGACC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Blumenfeld M,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               map of the human genome.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      WPI; 2000-013267/01.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            (GEST ) GENSET.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              diagnosis; ss
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       W09954500-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  21-APR-1999;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         10-SEP-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     21-APR-1998;
23-NOV-1998;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            28-OCT-1999
                                                                                                                                                                                                                                                                                                                                                                                                                                      AAZ71844;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Cohen D,
                                                                                                                                                                                                                                                                                                                                                             RESULT 525
                                                                                                                                                                                                                                                                                                                                                                                 AAZ71844/c
8X88888X8
                                                                                                                                                                                                                                                                 8
                                                                                                                                                                                                                                                                                                    셤
```

Matches

ਨੇ 용

g

HOMO

```
The invention traders to a mover isologue of ANGE-CLIDB, ANGE-CLIDB, ANGE-CLIDB, CLIDB or CLIDD, mRNA, or ANGE-CLIDB or ANGE-CLIDB or ANGE-CLIDB or ANGE-CLIDB or ANGE-CLIDB or ANGE-CLIDB or CLIDT, CLIDD, CLIDD, CLIDD or CLIDD or COMPINED or ANGE-CLIDB or ANGE-CLIDB or CLIDD or Complement, homologue or fragment. The novel nucleic acid sequences have complement, homologue or fragment. The novel nucleic acid sequences antipyretic, and antihiflammatory. The nucleic acid sequences be used in gene therapy to treat disorders. The nucleic acid sequences care useful for screening agents that inhibit or enhance activity of an ANGE CLIDP gene. The agent or antibody is useful for treating complement or antibody is useful for thintis or non-atopic asthma. The antibody is cuseful in an assay detecting or measuring the polypeptide in the sample. The splice variant of ANGE, CLIDP is useful for polypeptide. The splice variant of ANGE, CLIDP is useful for con-atopic asthma, or predicting the severity, or predisposition to a non-atopic asthma, or predicting the severity, or predisposition to a complete or the invertion of apprease a phis polynucleotide sequence represents a primer used in the complete or the invertion or apprease the apprease or the complete or the invertion or apprease the apprease or the complete or the invertion or apprease the apprease or the complete or the invertion or apprease the apprease or the complete or the invertion or apprease the apprease the apprease or the complete or the comple
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         New nucleic acid sequence comprising an ANGE, CLLD8 or CLLD7 mRNA, or their hybrid, useful for screening agents for treating IgE-mediated diseases, e.g. asthma, atopy, hay fever, eczema, atopic dermatitis, or allergic rhinitis.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     The invention relates to a novel isolated or recombinant nucleic acid
                                                    ANGE, CLLDB; CLLD7; ANGE-CLLD8; ANGE-CLLD7; CLLD7-CLLD8;
ANGE-CLLD8-CLLD7; antiallergic; antiasthmatic; dermatological;
antipyretic; antiinflammatory; gene therapy; IgE-mediated disease;
          exon 12 and ANGE exon 3 SNP identification primer #103
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                0.3%; Score 15.4; DB 1; Length 20;
04.1%; Pred. No. 3.5e+02;
ve 0; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Human TRIP6 antisense oligonucleotide ISIS #198761.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sequence 20 BP; 5 A; 5 C; 3 G; 7 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Cookson W, Tinsley J;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Disclosure; Page 408; 429pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     exemplification of the invention.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            2636 ATGTCTACTGTAAACTG 2652
                                                                                                                                                                                                                                                                                                                                      21-JUN-2002; 2002WO-GB002859.
                                                                                                                                                                                                                                                                                                                                                                                     21-JUN-2001; 2001GB-00015211.
21-JUN-2001; 2001GB-00015212.
21-JUN-2001; 2001GB-00015213.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ilarity 94.1%;
Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         (ISIS-) ISIS INNOVATIONS LTD
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ACC82889 standard; DNA; 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Moffatt M,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         WPI; 2003-201405/19.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Local Similarity
hes 16, Conserv
                                                                                                                                                                                                                                             WO2003000727-A2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    27-AUG-2003
                                                                                                                                                                                              Unidentified
                                                                                                                                                                                                                                                                                            03-JAN-2003.
                                                                                                                                             primer; 88.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ACC82889;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Zhang Y,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      RESULT 528
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Matches
                       CLLD8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ACC62889
ID ACC8
XX ACC8
AC ACC8
XX DT 27-A
XX XX
g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ..
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              The present invention relates to a new compound which is targeted to a nucleic acid molecule encoding RECQLS and hybridises with and inhibits the expression of RECQLS. The compound is useful for preventing or retating an animal having a disease or condition associated with RECQLS e.g. tumour or inflammation. The present nucleic acid sequence represents a human RECQLS mRNA inhibition oligonucleotide of the invention
                                                                                                     ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              A compound, which hybridizes with and inhibits the expression of RECQL5 gene, useful for preventing or treating an animal having a disease or condition associated with RECQL5 e.g. tumor or inflammation.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Human RECQL5 inhibition chimeric phosphorothioate oligonucleotide #51.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Gaps
                                                                                                     Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ö
                                                                                                     ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               0.3%; Score 15.4; DB 1; Length 20;
4.1%; Pred. No. 3.5e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        RECQL5; tumour; inflammation; cytostatic; antiinflammatory; RECQL5-inhibitor; human; ss.
                                                      Length 20;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Indels
                                                                                                     1, Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Sequence 20 BP; 3 A; 3 C; 5 G; 9 T; 0 U; 0 Other;
     Sequence 20 BP; 6 A; 7 C; 0 G; 7 T; 0 U; 0 Other;
                                                 0.3%; Score 15.4; DB 1;
94.1%; Pred. No. 3.5e+02;
tive 0; Mismatches 1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Claim 3; Page 92; 127pp; English.
                                                                                                                                                          4356 GAAAATAAGGTTTTGGG 4372
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    844 AAAGCATCTGAGAAAGC 860
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ADG70287 standard; DNA; 20 BP.
                                                                                                                                                                                                                                                                                                                                    ABX03737 standard; DNA; 20 BP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                01-MAR-2002; 2002WO-US006246
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            01-MAR-2001; 2001US-00798185.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         94.18;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            20 AAAGCATCTGATAAAGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               (first entry)
                                                                                                                                                                                                         GANATAATGTTTTGGG
                                                                                                                                                                                                                                                                                                                                                                                                                                       (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Query Match 0.3
Best Local Similarity 94.1
Matches 16; Conservative
                                                                                                           16; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              (ISIS-) ISIS PHARM INC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               WPI; 2002-750450/81.
                                                            Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Ward DT, Watt AT;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            WO200270535-A1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               11-MAR-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                       08-JAN-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              12-SEP-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Chimeric.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ADG70287
                                                                                                                                                                                                                                                                                                                                                                                        ABX03737;
                                                                                                                                                                                                           17
```

ö

Gaps

; 0

RESULT 527 ADG70287/c

셤 ð

```
New antisense compound targeted to a nucleic acid molecule encoding mammalian glucocorticoid receptor, useful for treating diabetes, obesity, cardiovascular disorder, hyperlipidemia or Cushing's syndrome.
                                                                                                          antisense oligonucleotide; glucocorticoid receptor; infection; inflammation; tumour formation; diabetes; obesity; cardiovascular disorder; hyperlipidaemia; Cushing's syndrome; human; 88; phosphorothioate backbone; 2 -methoxyethyl; 2'-MOE.
                                                                    Human glucocorticoid receptor-specific antisense oligonucleotide #3190.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Claim 4; SEQ ID NO 3190; 985pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     4221
                                                                                                                                                                                                                                                                                                                                                20-MAY-2003; 2003WO-US016084.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ВР
                                                                                                                                                                                                                                                                                                                                                                                          20-MAY-2002; 2002US-0381857P
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     4205 GGGACATGGAGACTGGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               19 GGGAGATGGAGACTGGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ADH66905 standard; DNA; 20
                            (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           16; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Nalseth AE;
                                                                                                                                                                                                                                                                                                                                                                                                                                  (PHAA ) PHARMACIA CORP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      WPI; 2004-035034/03.
                                                                                                                                                                                                                                                            WO2003099215-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             WO2003099215-A2
                                                                                                                                                                                                                      Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Homo sapiens
                            25-MAR-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         25-MAR-2004
                                                                                                                                                                                                                                                                                                      04-DEC-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Crosby SD,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ADH66905;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               RESULT 530
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ADH66905/
      셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ઠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  The invention relates to antisense compounds targetted to a nucleic acid encoding thyroid hormone receptor interactor 6 (TRIP6) to inhibit its expression. TRIP6 is also known as OPA-interacting protein-1 (OIP-1) and zyxin-related protein-1 (ZRP-1). TRIP6 but a located on chromosome 7q22. Antisense compounds of the invention are useful for modulating the expression of TRIP6 and for treating diseases or conditions associated with the expression of TRIP6 such as hyperproliferative disorders (e.g. cancer). They are useful for diagnostics, therapeutics, prophylaxis e.g. to prevent or delay infection, inflammation or tumour formation, as tesearch reagents and kits and in distinguishing between functions of various members of a biological pathway. The are also useful in antisense therapy. The present sequence is an antisense oligo targetted to human TRIP6 DNA. This oligo is used in the exemplification of the invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             New antisense oligonucleotides targeted to nucleic acids encoding thyroid hormone receptor interactor 6, useful for diagnosing or treating hyperproliferative disorders, such as cancer.
                                                                                                                                                                                                                                                       /note= "Phosphorothioate backbone; All cytidine residues are 5-methylcytidines"
Human; antisense; thyroid hormone receptor interactor 6; TRIP6; tumour; OPA-interacting protein-1; OIP-1; zyxin-related protein-1; prophylaxis; inflammation; therapy; hyperproliferative disorder; infection; cancer; chromosome 7q22; ZRP-1; phosphorothioate; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                   /note= "2'-methoxyethyl (2'-MOE) nucleotides"
                                                                                                                                                                                                                                                                                                                                                             /note= "2'-methoxyethyl (2'-MOE) nucleotides'
16. .20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       0.3%; Score 15.4; DB 1; Length 20; 94.1%; Pred. No. 3.5e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Sequence 20 BP; 8 A; 3 C; 3 G; 6 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   0; Mismatches
                                                                                                                                                                     Location/Qualifiers 1.20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Example 15; Page 76; 111pp; English
                                                                                                                                                                                                                                                                                                                                              /mod base= OTHER
                                                                                                                                                                                                                                                                                                                                                                                                         /*tag= c
/mod base= OTHER
                                                                                                                                                                                                                                   OTHER
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         2699 AAAGAAACTTGTTCTG 2715
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ADH66356 standard; DNA; 20 BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       08-NOV-2001; 2001US-00008789.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               05-NOV-2002; 2002WO-US035479.
                                                                                                                                                                                                               /*tag= a
/mod_base=
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AAAGAAACTTTTCTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Query Match 0.3
Best Local Similarity 94.1
Matches 16; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 (ISIS-) ISIS PHARM INC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Bennett CF, Dobie K;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     WPI; 2003-430662/40.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             WO2003040328-A2
                                                                                                                                                                                         modified base
                                                                                                                                                                                                                                                                                                 modified_base
                                                                                                                                                                                                                                                                                                                                                                                   modified base
                                                                                                          Homo sapiens.
Synthetic.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       15-MAY-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ADH66356
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            RESULT 529
ADH66356/c
ID ADH6631
XX
AC ADH6631
```

```
The invention comprises an antisense oligonucleotides that are targeted to nucleic acids encoding a mammalian glucocorticoid receptor. The antisense oligonucleotides of the invention are useful for preventing or delaying infection, inflammation or tumour formation. The antisense oligonucleotides are also useful for treating diabetes, obesity, cardiovascular disorders, hyperlipidaemia or Cushing's syndrome. The present DNA sequence represents an antisense oligonucleotide that targets the human glucocorticoid receptor gene. NOTE: The present sequence contains 2'-methoxyethyl (2'-MOE) wings and a phosphorothioate backbone.
                                                                                                                                                                                                                                                                                                                                                                                    ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      antisense oligonucleotide, glucocorticoid receptor; infection; finfiammation; tumour formation; diabetes; obesity; cardiovascular disorder; hyperlipidaemia; Cushing's syndrome; human; ss; phosphorothioate backbone; 2-methoxyethy1; 2'-MOE.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Human glucocorticoid receptor-specific antisense oligonucleotide #3739.
                                                                                                                                                                                                                                                                                                                                                                                    Gaps
                                                                                                                                                                                                                                                                                                                                                                                    ö
                                                                                                                                                                                                                                                                                                                       0.3%; Score 15.4; DB 1; Length 20; 94.1%; Pred. No. 3.5e+02;
                                                                                                                                                                                                                                                                                                                                                                                 1; Indels
                                                                                                                                                                                                                                                                         Sequence 20 BP; 3 A; 9 C; 3 G; 5 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                               0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                04-DEC-2003.
```

ઠે

```
New antisense oligonucleotide for modulating endothelial lipase expression, for diagnosing, preventing or treating e.g. dyslipidemia, low high density lipoprotein or cardiovascular disorders.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    /note= "This oligonucleotide has a phosphorothioate backbone and 2-methyoxyethyl (2'-MOB) wings at the 5' and 3' ends, which are 4 nucleotides in length. Also all cytidine residues are 5-methylcytidines"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Antilipaemic; Cardiovascular; Analgesic; Antianginal; Antisense therapy; Human; Endothelial Lipase; dyslipidaemia; high density lipoprotein; {\rm HDL}; cardiovascular disorder; metabolic syndrome X_i ss.
                                                                                                                                                                                                            The present invention relates to antisense oligonucleotides (ADJ21603-ADJ25510) targeted to human Endothelial Lipase (EL) coding sequence (ADJ25517), where the antisense oligonucleotide specifically Mybridises with and inhibits the expression of EL. The antisense oligonucleotides are useful for modulating the expression of En. The antisense oligonucleotides or tissues to treat diseases associated with EL expression, such as dyslipidaemia, low high density lipoprotein (HDL), cardiovascular discorder or metabolic syndrome X. In addition, the oligonucleotides are used for diagnostics, prophylaxis, or as research reagents or kits.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                New antisense oligonucleotide for modulating endothelial lipase
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Human endothelial lipase antisense oligonucleotide, SEQ ID 1313.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           0.3%; Score 15.4; DB 1; Length 20; 94.1%; Pred. No. 3.5e+02; tive 0; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                       Sequence 20 BP; 7 A; 5 C; 2 G; 6 T; 0 U; 0 Other;
                                                                                                                                                                                 Claim 3; SEQ ID NO 1453; 1007pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         /*tag= a
/mod_base= OTHER
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       983 CACACAAATCTGGAGTT 999
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             18-JUL-2003; 2003WO-US022410.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       19-JUL-2002; 2002US-0397106P
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ADJ22915 standard; DNA; 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                4 CACACAAATCTGGACTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               20-MAY-2004 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Query Match
Best Local Similarity 94.1'
Matches 16; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                (PHAA ) PHARMACIA CORP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   WPI; 2004-132912/13
                                                        WPI; 2004-132912/13.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                WO2004009541-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         modified base
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        29-JAN-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Synthetic.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ADJ22915;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               BG
                  Bhat BG;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Bhat
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      RESULT 532
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Tomo
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Key
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   a
8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ö
                                                                                                                                                                                                                                                                                                                                                             The invention comprises an antisense oligonucleotides that are targeted to nucleic acids encoding a mammalian glucocorticoid receptor. The antisense oligonucleotides of the invention are useful for preventing or delaying infection, inflammation or tumour formation. The antisense oligonucleotides are also useful for treating diabetes, obesity, cardiovascular disorders, hyperlipidemia or Cushing's syndrome. The present DNA sequence represents an antisense oligonucleotide that targets the human glucocorticoid receptor gene. NOTE: The present sequence contains 2'-methoxyethyl (2'-MOE) wings and a phosphorothioate backbone.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              /mcd_base= OTHER
/mcd_base= This oligonucleotide has a phosphorothicate
/note= "This oligonucleotide (2'-MCB) wings at the 5'
backbone and 2-'methyoxyethyl (2'-MCB) wings at the 5'
and 3' ends, which are 4 nucleotides in length. Also all
cytidine residues are 5-methylcytidines"
                                                                                                                                                                                                                                 New antisense compound targeted to a nucleic acid molecule encoding mammalian glucocorticoid receptor, useful for treating diabetes, obesity, cardiovascular disorder, hyperlipidemia or Cushing's syndrome.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Antilipaemic; Cardiovascular; Analgesic; Antianginal; Antisense therapy; Human; Endothelial Lipase; dyslipidaemia; high density lipoprotein; HDL; cardiovascular disorder; metabolic syndrome X; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Human endothelial lipase antisense oligonucleotide, SEQ ID 1453
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         0.3%; Score 15.4; DB 1; Length 20; 94.1%; Pred. No. 3.5e+02; ive 0; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Sequence 20 BP; 4 A; 9 C; 3 G; 4 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                             Claim 4; SEQ ID NO 3739; 985pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     4221
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ADJ23055 standard; DNA; 20 BP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 19-JUL-2002; 2002US-0397106P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        18-JUL-2003; 2003WO-US022410
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              20 GGGAGATGGAGACTGGT 4
                           20-MAY-2003; 2003WO-US016084
                                                                     20-MAY-2002; 2002US-0381857P
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ø
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     4205 GGGACATGGAGACTGGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Query Match
Best Local Similarity 94.1
Matches 16; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1. .20
/*tag=
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           (PHAA ) PHARMACIA CORP.
                                                                                                                                                           Crosby SD, Nalseth AE;
                                                                                                                  (PHAA ) PHARMACIA CORP
                                                                                                                                                                                                   WPI; 2004-035034/03
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            WO2004009541-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Key
modified_base
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         20-MAY-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  29-JAN-2004
```

Synthetic.

Ношо

ADJ23055;

RESULT 531

8

ADJ23055

ö

Gaps

.. 0

gibbs-10-667-022-4.rng

```
ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           nucleic acid molecule encoding Navi.3, where the antisense compound specifically hybridizes with and inhibits the expression of Navi.3. The compound and composition are useful for treating a disease or condition associated with Navi.3, e.g. pain including but not limited to neuropathic pain, post-herpetic neuralgia, chronic pain, lower back pain, diabetic neuropathy, trigeminal neuropathy, arthritic pain, acute pain, pain from burns, migraine headache, cluster headache, mild-to-moderate headache; seizure disorder such as childhood seizure disorder, including but not limited to neonatal or infantile epilepsy; or ataxia. The present
expression, for diagnosing, preventing or treating e.g. dyslipidemia, low high density lipoprotein or cardiovascular disorders.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 New antisense compound targeted to a nucleic acid molecule encoding Navl.3, useful for useful for treating a disease or condition associated with Navl.3, e.g., pain, seizure disorder such as childhood seizure disorder, or ataxia.
                                                                                        The present invention relates to antisense oligonucleotides (AbJ21603-AbJ25510) targeted to human Endothelial Lipase (EL) coding sequence (AbJ25517), where the antisense oligonucleotide specifically hybridises with and inhibits the expression of EL. The antisense oligonucleotides are useful for modulating the expression of endothelial lipase in cells or tissues to treat diseases associated with EL expression, such as dyslipidaemia, low high density lipoprotein (HDL), cardiovascular disorder or metabolic syndrome X. In addition, the oligonucleotides are used for diagnostics, prophylaxis, or as research reagents or kits.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Navl.3; Analgesic; Nootropic; Neuroprotective; post-herpetic neuralgia; diabetic neuropathy; arthritic pain; migraine headache; infantile epilepsy; ataxia; ss.
                                                                                                                                                                                                                                                                                                                                                                                Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           present invention relates to an antisense compound targeted to
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Chimeric phosphorothioate oligonucleotide to target Nav1.3 #8377.
                                                                                                                                                                                                                                                                                                                                                                             ö
                                                                                                                                                                                                                                                                                                                                    0.3%; Score 15.4; DB 1; Length 20; 94.1%; Pred. No. 3.5e+02; ve 0; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                             Sequence 20 BP; 7 A; 5 C; 3 G; 5 T; 0 U; 0 Other;
                                                         Claim 3; SEQ ID NO 1313; 1007pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Claim 4; SEQ ID NO 8377; 417pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                   983 CACACAAATCTGGAGTT 999
                                                                                                                                                                                                                                                                                                                                                                                                                                                        13
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ADK81043 standard; DNA; 20 BP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    14-AUG-2003; 2003WO-US025465
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           14-AUG-2002; 2002US-0403416P
                                                                                                                                                                                                                                                                                                                                                       94.1%;
                                                                                                                                                                                                                                                                                                                                                                                                                                       CACACAAATCTGGACTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      (first entry)
                                                                                                                                                                                                                                                                                                                                                                         16; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                (PHAA ) PHARMACIA CORP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              WPI; 2004-203785/19
                                                                                                                                                                                                                                                                                                                                    Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        WO2004016754-A2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        20-MAY-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               26-FEB-2004.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Roberds SL;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Synthetic.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ADK81043;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ##X#X0000000000X8
                                                                                                                                                                                                                                                                                                                                                                                                                   ઠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                   셤
```

```
ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    The present invention relates to an antisense compound targeted to a mucleic acid molecule encoding Nav1.3, where the antisense compound specifically hybridizes with and inhibits the expression of Nav1.3. The compound and composition are useful for treating a disease or condition neurogathy path herpetic neuralgia, chronic pain, lower back pain, diabetic neurogathy, trigeminal neuralgia, chronic pain, lower back pain, pain from burns, migraine headache, cluster headache, mild-to-moderate pain, seizure disorder such as childhood seizure disorder, including but not limited to neonatal or infantile epilepsy; or ataxia. The present sequence represents a chimeric phosphorothioate oligonuclectide with
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           New antisense compound targeted to a nucleic acid molecule encoding about.3, useful for useful for treating a disease or condition associated with Navl.3, e.g. pain, seizure disorder such as childhood seizure disorder, or ataxia.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Navl.3; Analgesic; Nootropic; Neuroprotective; post-herpetic neuralgia; diabetic neuropathy; arthritic pain; migraine headache; infantile epilepsy; ataxia; ss.
               2'MOB wings and a deoxy gap. Used during the antisense inhibition of human Navl.3 expression, the oligonucleotides are designed to target different regions of the human Navl.3 RNA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Gaps
                                                                                                                                                                        Gapa
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  2'MOB wings and a deoxy gap. Used during the antisense inhibition of human Nav1.3 expression, the oligonucleotides are designed to target different regions of the human Nav1.3 RNA.
sequence represents a chimeric phosphorothioate oligonucleotide with
                                                                                                                                                                                                                                                                                                                                                                                                                                                       Chimeric phosphorothioate oligonucleotide to target Nav1.3 #4096.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ö
                                                                                                                                                                      ö
                                                                                                                               0.3%; Score 15.4; DB 1; Length 20;
14.1%; Pred. No. 3.5e+02;
ve 0; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                tch 0.3%; Score 15.4; DB 1; Length 20; al Similarity 94.1%; Pred. No. 3.5e+02; 16; Conservative 0; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Sequence 20 BP; 6 A; 6 C; 4 G; 4 T; 0 U; 0 Other;
                                                                                            Sequence 20 BP; 6 A; 4 C; 5 G; 5 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Claim 4; SEQ ID NO 4096; 417pp; English.
                                                                                                                                                                                                        4459 ACTGAAGTTGTCCAGGA 4475
                                                                                                                                                                                                                                 ACTGAAGTTCTCCAGGA 17
                                                                                                                                                                                                                                                                                                                                         BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        14-AUG-2002; 2002US-0403416P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  14-AUG-2003; 2003WO-US025465
                                                                                                                                                 Local Similarity 94.1%;
les 16; Conservative
                                                                                                                                                                                                                                                                                                                                         ADK76762 standard; DNA; 20
                                                                                                                                                                                                                                                                                                                                                                                                                    (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             (PHAA ) PHARMACIA CORP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    WPI; 2004-203785/19.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Best Local Similarity
Matches 16; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            WO2004016754-A2.
                                                                                                                                                                                                                                                                                                                                                                                                                    20-MAY-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               36-FEB-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Roberds SL;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Synthetic
                                                                                                                                                                                                                                                                                                                                                                              ADK76762;
                                                                                                                                 Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Query Match
                                                                                                                                                       Best Loca
Matches
                                                                                                                                                                                                                                                                                                    RESULT 534
 88888
                                                                                                                                                                                                          ठ
                                                                                                                                                                                                                                           셤
```

Š

```
WO2004030750-A1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Homo sapiens
                           Homo sapiens.
                                                               15-APR-2004.
                                                                                                                                                                                                                                                                                                                                                                           invention.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ADO53680;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     17
                                                                                                                                         Kane CD;
                                                                                                                                                                                                                                                                                                                                                                                                                                 Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ADO53680,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  RESULT
셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                    ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ö
                                                                                                                                                                                                                                                                                                                                                                                The present invention relates to an isolated nucleic acid with cytostatic action named cancer related gene-Liver 2 CRG-L2. The polynucleotides and polypeptides are useful in diagnosing and treating cancer, e.g. breast, kidney, colon, preferably liver cancer. The present sequence represents a primer of the invention.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             antidiabetic; immunosuppressive; cardiovascular; antilipemic; antiarteriosclerotic; hepatotropic; litholytic; anorectic; neuroprotective; vasotropic; antisense; gene therapy; Parnesoid X receptor; diabetes; immunological disorder; cardiovascular disorder; dyslipidemia; atherosclerosis; high density lipoprotein; low density lipoprotein; hypercholesterolemia;
                                                                                                                                                                                                                                                                                                                                     Cancer Related Gene-Liver 2 sequences, useful in diagnosing and treating cancer, e.g. breast, kidney, colon, preferably liver cancer.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Farnesoid X receptor gene expression antisense inhibitory oligo #1468.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Gaps
                                                                                                                                                      Cytostatic; Cancer Related Gene; Liver; cancer; liver cancer; 88;
Human cancer related gene-Liver 2; CRG-L2; primer.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                              Score 15.4; DB 1; Length 20;
Pred. No. 3.5e+02;
0; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                           Sequence 20 BP; 7 A; 4 C; 7 G; 2 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                   Harkins-Perry SR;
                                                                                                                                                                                                                                                                                                                                                                    Example; SEQ ID NO 9; 42pp; English
                                                                                                                                                                                                                                                                                (WISC ) WISCONSIN ALUMNI RES FOUND.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       3890 CACAGICIGITCITGCC 3906
             4458 CACTGAAGTTGTCCAGG 4474
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         BP.
                       CACTGAAGTTCTCCAGG 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        4
                                                                             BP
                                                                                                                                                                                                                                             16-JUL-2003; 2003WO-US022145.
                                                                                                                                                                                                                                                              2002US-0396626P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   0.3%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Best Local Similarity 94.1%;
Matches 16; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ADO54095 standard; DNA; 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         20 ccckércrérrécc
                                                                             ADN12104 standard; DNA; 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              (first entry)
                                                                                                                                     Primer of the invention #5
                                                                                                                   (first entry)
                                                                                                                                                                                                                                                                                                    Graveel CR,
                                                                                                                                                                                                                                                                                                                       WPI; 2004-156548/15.
                                                                                                                                                                                                        WO2004008102-A2.
                                                                                                                                                                                                                                                                17-JUL-2002;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               15-JUL-2004
                                                                                                                                                                                                                                                                                                     Farnham PJ,
                                                                                                                    17-JUN-2004
                                                                                                                                                                                                                          22-JAN-2004
                                                                                                                                                                                      Synthetic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ADO54095;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Query Match
                                                                                                  ADN12104;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       RESULT 536
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ADO54095,
                                                                      ADN12104
                                                            RESULT
                                                                               ò
```

```
The invention relates to an antisense compound 8-30 nucleobases in length targeted to a nucleic acid molecule encoding Farnesoid X receptor (FXR), where the antisense compound specifically hybridizes with and inhibits the expression of FXR. The composition and methods are useful for tissues, or for treating diseases or conditions associated with FXR, such as diabetes, immunological disorders, cardiovascular disorders, e.g. displaidemia and its symptoms, atherosclerosis, low HDL (high density lipoprotein), elevated LDL (low density lipoprotein) or lipoprotein, elevated LDL (low density lipoprotein) or hypercholesterolemia, gallstones, hypertialgy/ceridemia, obesity, hypercholesterolemia, gallstones, hypertialgy/ceridemia, obesity, neurological disorders, or isohemia/reperfusion injury. In addition, the composition is used for diagnostics, prophylaxis, or as research reagents or this sequence corresponds to an antisense oligonucleotide of the
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                antidiabetic; immunosuppressive; cardiovascular; antilipemic; antiarteriosclerotic; hepatotropic; litholytic; anorectic; neuroprotective; vasotropic; antisense; gene therapy; Farnesoid X receptor; diabetes; immunological disorder; cardiovascular disorder; dyslipidemia; atherosclerosis; high density lipoprotein; low density lipoprotein; low density lipoprotein; low density lipoprotein; high density lipoprotein; low density; neurological disorder; ischemia; reperfusion; diagnostics; prophylaxis.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     New antisense oligonucleotides useful for modulating expression of Farnesoid X Receptor (FXR) or for treating diseases associated with FXR, e.g. diabetes, immunological disorders, cardiovascular disorders, gallstones or obesity.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Farnesoid X receptor gene expression antisense inhibitory oligo #1053.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Gaps
gallstones; hypertriglyceridemia; obesity; neurological disorder; ischemia; reperfusion; diagnostics; prophylaxis.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           .
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             0.3%; Score 15.4; DB 1; Length 20; 94.1%; Pred. No. 3.5e+02; ative 0; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         G; 8 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Claim 4; SEQ ID NO 1468; 150pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            3477 GGAGAGTAAACCACCAC 3493
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Bb.
                                                                                                                                                                                                                                                                                                                                                                               25-SEP-2003; 2003WO-US030353.
                                                                                                                                                                                                                                                                                                                                                                                                                                                           25-SEP-2002; 2002US-0413588P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Sequence 20 BP; 2 A; 5 C; 5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ADO53680 standard; DNA; 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        GGAGAGTAAACGACCAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        15-JUL-2004 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    16; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             (PHAA ) PHARMACIA CORP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           WPI; 2004-347928/32.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Query Match
Best Local Similarity
```

ô

```
(UYJO ) UNIV JOHNS HOPKINS.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ADH26724;
                                                                                                                                                                                                                                                                                                                        Query Match
                                                                                                                                                                                                                                                                                                                                     Best Loca
Matches
                                                                                                                                                                                                                                                                                                                                                                                                                            RESULT 539
                                                                                                                                                                                                                                                                                                                                                                                                                                         ADH26724
 셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                               8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                ö
                                                                                                                                                                                                                                      The invention relates to an antisense compound 8-30 nucleobases in length targeted to a nucleic acid molecule encoding Farnesoid X receptor (FXR), where the antisense compound specifically hybridizes with and inhibits the expression of FXR. The composition and methods are useful for inhibiting the expression of FXR (Farnesoid X receptor) in cells or tissues, or for treating diseases or conditions associated with FXR, such as diabetes, immunological disorders, cardiovascular disorders, e.g. dysliptidemia and its symptoms, atherosclerosis, low HDL (high density lipoprotein), elevated LDL (low density lipoprotein) or hyperbolesterolemia, gallstones, hypertriglyceridemia, obesity, neurological disorders, or ischemial/reperfusion injury. In addition, the composition is used for diagnostics, prophylaxis, or as research reagents or kies. This sequence corresponds to an antisense oligonucleotide of the
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          tyrosine kinase; cancer; anti-cancer agent; signalling molecule; tumourigenesis; somatic alteration; colorectal cancer; NTRK3; FES; GUCY2F; MCCK; MLK4; kinase domain; cytostatic; tyrosine kinase inhibitor;
                                                                                                                                                         New antisense oligonuclectides useful for modulating expression of strnesoid X Receptor (FXR) or for treating diseases associated with FXR, e.g. diabetes, immunological disorders, cardiovascular disorders, gallstones or obesity.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Novel mutant protein tyrosine kinase-related oligonucleotide SegID1040
                                                                                                                                                                                                                                                                                                                                                                                                                                                               Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                ö
                                                                                                                                                                                                                                                                                                                                                                                                                                        0.3%; Score 15.4; DB 1; Length 20; 94.1%; Pred. No. 3.5e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                               1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                 Sequence 20 BP; 2 A; 5 C; 4 G; 9 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                               0; Mismatches
                                                                                                                                                                                                                   Claim 4; SEQ ID NO 1053; 150pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              guanylate cyclase stimulator; ss
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   3477 GGAGAGTAAACCACCAC 3493
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   BP
                                             25-SEP-2003; 2003WO-US030353.
                                                                  25-SEP-2002; 2002US-0413588P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           21-FEB-2003; 2003US-0448537P.
29-MAY-2003; 2003US-0473895P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       18-FEB-2004; 2004WO-US004452
                                                                                                                                                                                                                                                                                                                                                                                                                                                  94.18;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ADT01052 standard; DNA; 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  GGAGAGTAAACGACCAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                               16; Conservative
                                                                                       (PHAA ) PHARMACIA CORP
                                                                                                                                                                                                                                                                                                                                                                                                                                                    Local Similarity
                                                                                                                                     WPI; 2004-347928/32.
WO2004030750-A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         WO2004082458-A2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               16-DEC-2004
                      15-APR-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                30-SEP-2004
                                                                                                                                                                                                                                                                                                                                                                                             invention.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ADT01052;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          18
                                                                                                                                                                                                                                                                                                                                                                                                                                        Query Match
                                                                                                              Kane CD;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      RESULT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       셤
δ
```

```
This invention relates to a novel activated mutant protein tyrosine kinases and associated methods for diagnosing cancer and screening for anti-cancer agents. Protein kinases are signalling molecules involved in tumourigenesis. Mutational analysis of the human tyrosine kinase gene family identified somatic alteration sin 1 in 5 colorectal cancers, with the majority of mutations occurring in the NTRK3, FES, GUCY2F and MCCK/MLK4 genes. Most were identified in the kinase domain. The invention may be useful for the production of compounds with a cytostatic activity acting as protein tyrosine kinase inhibitors or guanylate cyclase stimulators. The invention may be useful for developing methods for detecting mutations involved in cancer or screening for anti-cancer agence. The present sequence is that of a human-derived oligonucleotide which is related to the invention.
                                                                                                                                                  Activated mutant protein tyrosine kinases (e.g. NTRK3, FES and MCCK) and associated methods for diagnosing cancer and screening for anti-cancer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Human PI3K regulatory subunit 4, p150 DNA antisense oligonucleotide #49
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Gape
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Human, phosphoinositide-3-kinase regulatory subunit 4, p150, P13K, P13 kinase; ss, antisense oligonucleotide; phosphorothioate linkage; 2'-O-methoxyethyl sugar moiety; 5-methylcytosine; hyperproliferative disorder; cancer, Chedlak-Higashi syndrome; neurodegenerative disorder; metabolic disorders; inflammation; cytostatic; immunomodulator; neurodegenerative; antimicrobial;
   Vogelstein B;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      New antisense oligonucleotides inhibiting the expression of phosphoinositide-3-kinase, regulatory subunit 4, p150, useful for
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     0.3%; Score 15.4; DB 1; Length 20; 94.1%; Pred. No. 3.5e+02; lve 0; Mismatches 1; Indels
Kinzler KW,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Sequence 20 BP; 5 A; 4 C; 6 G; 5 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                Disclosure; SEQ ID NO 1040; 363pp; English.
Velculescu V,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       825 TTTCCAGAAAGCATCAG 841
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ADH26724 standard; DNA; 20 BP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       31-MAY-2002; 2002US-00160786
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  31-MAY-2002; 2002US-00160786
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Local Similarity 94.1%;
les 16; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TTTCCAGGAAGCATCAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              (first entry)
   Parsons W,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             (ISIS-) ISIS PHARM INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Dobie KW;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       WPI; 2004-051923/05.
                                                                       WPI; 2004-718702/70
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  antiinflammatory.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                US2003225013-A1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              11-MAR-2004
Bardelli A,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            04-DEC-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Freier SM,
```

```
Example 15; SEQ ID NO 59; 60pp; English.
                                                                                                                                                                                                                                                                                                                    AAACCGGTATTACTGGTTTT 1
                                                                                                                                                                                                                                                                                                                                                                                    BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  18-SEP-2003; 2003US-00667022
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             31-MAY-2002; 2002US-00160786
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1. .20
/*tag= a
                                                                                                                                                                                                                                                                                                                                                                                    ADL34613 standard; DNA; 20
                                                                                                                                                                                                                                                                                                                                                                                                                                      17-JUN-2004 (first entry)
                                                                                                                                                                                                                                      Query Match
Best Local Similarity 85.0<sup>1</sup>
Marches 17; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Dobie KW;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   WPI; 2004-282523/26.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    (FREI/) FREIER S M. (DOBI/) DOBIE K W.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    US2004063657-A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Key
modified base
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             01-APR-2004.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Freier SM,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Synthetic.
                                                                                                                                                                                                                                                                                                                                                                                                               ADL34613;
                                                                                                                                                                                                                                                                                                                                                             RESULT 541
                                                                                                                                                                                                                                                                                                                                                                          ADL34613
                                                                                                                                                                                                                                                                                                                                                                                     염
 $$$$$$$$$$$$$$$$$$$$$$$
                                                                                                                                                                                                                                                                                               ð
                                                            The invention relates to a compound targeted to a nucleic acid molecule encoding human phosphoinositide-3-kinase (P13K) regulatory subunit 4, p150 p150. The compound is an antisense oligonucleotide that specifically hybridises with a nucleic acid molecule encoding P13K regulatory subunit 4, p150 and inhibits expression of the polypeptide. The antisense oligonucleotide comprises at least one modified internucleoside linkage i.e. a phosphorothioate linkage, at least one modified sugar moiety, preferably a 2'-0-methoxyethyl sugar moiety, or at least one modified nucleobase comprising a 5-methylcytosine. The antisense compounds are useful for modulating the expression of P13K regulatory subunit 4, p150 and for preventing or treating hyperproliferative disorders and metabolic disorders. These may also be used in research and diagnostics and in preventing or delaying infection or inflammation. This sequence
                                                                                                                                                                                                                                                                                                                          ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Human, phosphoinositide-3-kinase regulatory subunit 4; p150; P13K; p13 kinase; ds; antisense oligonucleotide; phosphorothioate linkage; 2'-0-methoxyethyl sugar moiety; 5-metholyCycosine; hyperproliferative disorder; cancer; Chediak-Higashi syndrome; neurodegenerative disorder; metabolic disorders; inflammation; cytostatic; immunomodulator; neurodegenerative; antimicrobial;
                                                                                                                                                                                                                                                                                                                           Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 New antisense oligonucleotides inhibiting the expression of phosphoinositide-3-kinase, regulatory subunit 4, p150, useful for preventing or treating diseases associated with the subunit, e.g. hyperproliferative disorders.
preventing or treating diseases associated with the subunit, e.g. hyperproliferative disorders.
                                                                                                                                                                                                                                                                                                                           ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Human PI3K regulatory subunit 4, p150 DNA target region #39.
                                                                                                                                                                                                                                                                                               Score 15.2; DB 1; Length 20; Pred. No. 3.6e+02; 0; Mismatches 3; Indels
                                                                                                                                                                                                                                                represents an antisense oligonucleotide of the invention
                                                                                                                                                                                                                                                                      Sequence 20 BP; 5 A; 3 C; 4 G; 8 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Example 15; SEQ ID NO 127; 62pp; English
                                         Example 15; SEQ ID NO 59; 62pp; English.
                                                                                                                                                                                                                                                                                                                                                     3319 AAACCAGTAATACCGGTTTT 3338
                                                                                                                                                                                                                                                                                                                                                                             AAAccecrárracrecrirr 20
                                                                                                                                                                                                                                                                                                                                                                                                                                            ADH26792 standard; DNA; 20 BP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              31-MAY-2002; 2002US-00160786
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        31-MAY-2002; 2002US-00160786.
                                                                                                                                                                                                                                                                                                 0.3%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              (first entry)
                                                                                                                                                                                                                                                                                            Query Match
Best Local Similarity 85.0°
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                (ISIS-) ISIS PHARM INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Freier SM, Dobie KW;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 WPI; 2004-051923/05.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             antiinflammatory
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              US2003225013-A1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              11-MAR-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       04-DEC-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ADH26792;
                                                                                                                                                                                                                                                                                                                                                                                                                       RESULT 540
                                                                                                                                                                                                                                                                                                                                                                                                                                ઠ
                                                                                                                                                                                                                                                                                                                                                                              셤
      ##X#X55555555555555558
```

```
The invention relates to a compound targeted to a nucleic acid molecule encoding human phosphoinositide-3-kinase (PI3K) regulatory subunit 4, p150. The compound is an antisense oligonucleotide that specifically the profinates with a nucleic acid molecule encoding PI3K regulatory subunit 4, p150 and inhibits expression of the polypeptide. The antisense oligonucleotide comprises at least one modified internucleoside linkage i.e. a phosphorothicate linkage, at least one modified sugar moiety, or at least one modified nucleobase comprising a 5-methylcytosine. The antisense compounds are useful for modulating the expression of P13K regulatory subunit 4, p150 und for preventing or treating hyperproliferative disorders and metabolic disorders. These may also be used in research and diagnostics metabolic disorders. These may also be used in research and diagnostics and in preventing or delaying infection or inflammation. This sequence represents a P13K regulatory subunit 4, p150 DNA antisense
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                regulatory subunit 4; p150; internucleoside linkage; regulatory subunit 4; p150; internucleoside linkage; phosphorothicate linkage; 2'-O-methoxyethyl sugar; 5-methylcytosine; infection; inflammation; tumour formation; hyperproliferative disorder; cancer; Chediak-Higashi syndrome; metabolic disorder; immunomodulator;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         New antisense compound targeted to a nucleic acid molecule encoding phosphoinositide-3-kinase, regulatory subunit 4, p150, useful for treating cancer, Chediak-Higashi syndrome or a metabolic disorder.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                0.3%; Score 15.2; DB 1; Length 20;
85.0%; Pred. No. 3.6e+02;
tive 0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               /note= "phosphorothioate backbone"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Sequence 20 BP; 8 A; 4 C; 3 G; 5 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ISIS antisense oligonucleotide ISIS 207005.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       cytostatic; gene therapy; ss; primer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  3319 AAACCAGTAATACCGGTTTT 3338
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      base= OTHER
```

```
This invention describes a novel antisense oligonucleotides which appecifically hybridises to and inhibits the expression of human phosphoinositide-3-Kinase, regulatory subunit 4, piso. The oligonucleotides comprises at least one modified internucleoside linkage, preferably a phosphorothioate linkage. It also comprises at least one modified sugar molety, preferably a 2-O-methoxyethyl sugar molety. The antisense oligonucleotide further comprises at least one modified antisense oligonucleotide further comprises at least one modified antisense oligonucleotide further comprises at least one modified antisense oligonucleotide can be used in diagnostics and as research reagents and kits. It can also be used prophylactically, e.g. to prevent or delay infection, inflammation or tumour formation. It can also be used to treat a disease or condition associated with phosphoinositide-3-kinase, regulatory subunit 4, pls0, e.g. hyperproliferative disorder, preferably cancer, Chediak-Higashi syndrome or a metabolic disorder. The products of the invention are immunomodulators with cytostatic activity and can be used
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Sequence 20 BP; 5 A; 3 C; 4 G; 8 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          for gene therapy
```

```
Gaps
                             ö
0.3%; Score 15.2; DB 1; Length 20; 85.0%; Pred. No. 3.6e+02;
                           3; Indels
                           0; Mismatches
                                                     3319 AAACCAGTAATACCGGTTTT 3338
                                                                     1 AAACCGGTATTACTGGTTTT 20
                          17; Conservative
            Local Similarity
 Query Match
                           Matches
                                                                           셤
                                                      ઠે
```

Phosphoinositide-3-kinase regulatory subunit 4 p150 fragment 124641 ADL34681 standard; DNA; 20 BP (first entry) 17-JUN-2004 ADL34681; 

antisense; inhibitor; hybridisation; human; phosphoinositide-3-kinase; regulatory subunit 4; p150; internucleoside linkage; phosphorothioace linkage; 2'-O-methoxyethyl sugar; 5-methylcytosine; infection; inflammation; tumour formation; hyperproliferative disorder; cancer; Chediak-Higashi syndrome; metabolic disorder; immunomodulator; cytostatic; gene therapy; ds.

18-SEP-2003; 2003US-00667022 31-MAY-2002; 2002US-00160786 (FREI/) FREIER S M. (DOBI/) DOBIE K W. US2004063657-A1 01-APR-2004.

Homo sapiens.

Freier SM, Dobie KW; WPI; 2004-282523/26. New antisense compound targeted to a nucleic acid molecule encoding phosphoinositide-3-kinase, regulatory subunit 4, p150, useful for treating cancer, Chediak-Higashi syndrome or a metabolic disorder.

Example 15; SEQ ID NO 127; 60pp; English.

specifically hybridises to and inhibits the expression of human phosphoinositide-3-kinase, regulatory subunit 4, p150. The oligonucleotides comprises at least one modified internucleoside linkage, This invention describes a novel antisense oligonucleotides which

preferably a phosphorothioate linkage. It also comprises at least one modified sugar moiety, preferably a 2'-0-methoxyethyl sugar moiety. The antisense oligonucleotide further comprises at least one modified nucleobase, preferably a 5-methylcycosine. The antisense oligonucleotide can be used prophylately a 5-methylcycosine. The antisense oligonucleotide can be used in diagnostics and as research reagents and kits. It can also be used prophylatelyiny, e.g. to prevent or delay infection, inflammation or tumour formation. It can also be used to treat a disease or condition associated with phosphoinositide-3-kinase, regulatory cubunit 4, p150, e.g. hyperproliferative disorder, preferably cancer, Chediak-Higashi syndrome or a metabolic disorder. The products of the invention are immunomodulators with cytostatic activity and can be used for gene therapy. 

Sequence 20 BP; 8 A; 4 C; 3 G; 5 T; 0 U; 0 Other;

Gape ö Score 15.2; DB 1; Length 20; Pred. No. 3.6e+02; 0; Mismatches 3; Indels 0.3%; Query Match 0.3 Best Local Similarity 85.0 Matches 17; Conservative

ö

3319 AAACCAGTAATACCGGTTTT 3338 20 AAACCGGTATTACTGGTTTT 1 ઠે g Search completed: August 18, 2005, 08:37:31 Job time : 36 secs

THIS PAGE BLANK (1870)

104798, 104800, 104801, 104802, 104804, 104806, 126622,

Sequence Seq

```
US-10-956-157-104785

US-10-956-157-104786

US-10-956-157-104789

US-10-956-157-104789

US-10-956-157-104799

US-10-956-157-104799

US-10-956-157-104799

US-10-956-157-104799

US-10-956-157-104799

US-10-956-157-104799

US-10-956-157-104799

US-10-956-157-104802

US-10-956-157-104802

US-10-956-157-104803

US-10-956-157-12553

US-10-956-157-131620

US-10-956-157-131620

US-10-956-157-131620

US-10-956-157-131620

US-10-956-157-131620

US-10-956-157-131620
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                US-10-956-157-144934
US-10-956-157-144943
US-10-956-157-149222
US-10-956-157-149222
US-10-956-157-15937
US-10-956-157-163394
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             US-10-956-157-163576
US-10-956-157-164911
US-10-956-157-164901
US-10-956-157-171456
US-10-956-157-178113
US-10-956-157-183524
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        US-10-956-157-212854
US-10-956-157-228189
US-10-956-157-23741
US-10-956-157-245906
US-10-956-157-245128
US-10-956-157-247128
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             US-10-956-157-270613
US-10-956-157-27237
US-10-956-157-273285
US-10-956-157-276167
US-10-956-157-294257
US-10-958-348-3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            US-10-831-778-962
US-10-357-930-14833
US-10-942-251-3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   US-10-831-778-433
US-10-831-778-961
\begin{array}{c} \mathbf{7} \\ \mathbf{
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       υυ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   0000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Appli
Appli
Appli
Appli
Appli
8, Appl
5, Appli
51, Appli
51, Appli
51, Appli
104782,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Appl
Appl
Appl
Appl
Appli
Appli
Appli
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Appli
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Sequence 10633,
Sequence 3, Appl
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.
                                                                                                                                      August 18, 2005, 08:50:58; Search time 45 Seconds (without alignments)
3.758 Million cell updates/sec
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Description
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Sequence
Sequence
Sequence
Sequence
Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Sequence
Sequence
Sequence
Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Sequence
Sequence
Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Sequence
Sequence
Sequence
Sequence
Sequence
                                                                                                                                                                                                                                                                  1 ggatcccccgggctgcagga.....tcgaggggggggcccggtacc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                  1552
               version 5.1.6
- 2005 Compugen Ltd.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       US-09-908-975-10633

US-10-450-73-7

US-10-661-415-20

US-10-661-415-23

US-10-661-415-23

US-10-661-415-23

US-10-661-402-23

US-10-661-402-23

US-10-661-402-23

US-10-661-403-13

US-10-661-403-13

US-10-848-922-98

US-10-98-922-98

US-10-98-923-118-136

US-10-98-93-118-136

US-10-98-99-136

US-10-98-91-136

US-10-98-91-136

US-10-98-91-136

US-10-98-91-136

US-10-98-91-136

US-10-98-91-136

US-10-98-91-137

US-10-98-91-146-7

US-10-98-91-137

US-10-98-91-137

US-11-98-91-137

US-11-98-91-25-1
                                                                                                                                                                                                                                                                                                                                                                                                           Total number of hits satisfying chosen parameters:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     SUMMARIES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Minimum Match 0%
Maximum Match 100%
Listing first 782 summaries
                                                                                                 nucleic search, using sw model
                                                                                                                                                                                                                                                                                                                                                                    776 seqs, 16629 residues
                                                                                                                                                                                                                                                                                                          IDENTITY NUC
Gapop 10.0 , Gapext 0.5
                   GenCore (c) 1993
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           fetch4rnpb.seq:*
                                                                                                                                                                                                                       US-10-667-022-4
5085
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Length
                                       Copyright
                                                                                                                                                                                                                                                                                                                                                                                                                                                       Minimum DB seq length: 8 Maximum DB seq length: 80
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          %
Query
Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Post-processing:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             38.4
35
35
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Perfect score:
                                                                                                                                                                                                                                                                                                            Scoring table:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               31.4
31.4
31.4
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Score
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           272
                                                                                                 4
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        27.
                                                                                                 OM nucleic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Датараве :
                                                                                                                                                                                                                                                                       Seguence:
                                                                                                                                                                                                                                                                                                                                                                         Searched:
                                                                                                                                           е
::
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Result
                                                                                                                                           Run
```

OO υ υ

Sequence Seq

Sequence Sequence Sequence

Sequence Sequence Sequence Sequence

Sequence Sequence Sequence Sequence Sequence Sequence

Sequence Sequence Sequence Sequence

Appli

Sequence Sequence Sequence

Sequence Sequence Sequence

Sequence Sequence Sequence

000000

Sequence

Sequence 56, Appl Sequence 57, Appl Sequence 58, Appl Sequence 59, Appl	guence 60,	quence 62,	equence 63,	duence 65,	duence 66,	guence 67,	equence 68,	guence 70,	quence 71,	quence 72,	equence 73,	equence 74,	equence 75	equence /6	equence 77	equence 79	equence 80	equence 81	equence 82	equence 83	squence 84	equence 85	equence 86	equence 87	equence 88	equence 89	8 6	4	7 0	2 4	95	96	97	98	ν. Σ	10	2	Sequence 103, App	25	2 5	1 -	10	equence 10	equence 11	Sequence III, App	equence 11	aquence 11	equence 11	equence 11	equence 11	equence 11	equence 12	equence 12	equence 17	equence 17	equence 1	equence 12	equence 1.	ednence 15
US-10-160-786-56 US-10-160-786-56 US-10-160-786-57 US-10-160-786-59	US-10-160-786-60	US-10-160-786-61 US-10-160-786-62	US-10-160-786-63	US-10-160-786-64 US-10-160-786-65	US-10-160-786-66	US-10-160-786-67	US-10-160-786-68	US-10-160-786-89	US-10-160-786-75	US-10-160-786-71	US-10-160-786-73	US-10-160-786-74	US-10-160-786-75	US-10-160-786-76	US-10-160-786-77	US-10-160-786-78	US-10-160-786-80	US-TO-TOO-180-80	US-10-160-786-81	US-10-160-786-82	US-10-160-786-84	US-10-160-786-85	US-10-160-786-86	US-10-160-786-87	US-10-160-786-88	US-10-160-786-89	US-10-160-786-90	US-10-160-786-91	US-10-160-786-92	US-10-160-786-93	US-10-160-786-94	US-10-160-786-95	US-10-160-786-97	US-10-160-786-98	US-10-160-786-99	US-10-160-786-10	US-10-160-786-10	us-:	US-10-160-786-10	US-10-160-786-10	US-10-160-786-10	US-10-160-786-10	US-10-160-786-10	US-10-160-786-11	US-10-160-786-11	US-10-160-786-11	US-10-160-786-11	US-10-160-786-11	US-10-160-786-11	US-10-160-786-11	US-10-160-786-11	US-10-160-786-12	US-10-160-786-12	US-10-160-786-12	US-10-160-786-12	US-10-160-786-12	US-10-160-786-12	US-10-160-786-12	US-10-160-786-12
1111																																						20 1																					
) 0000 1444						-	<b>41</b>	c# «	d* <b>4</b> d	# 4	* **	. 4	₹	4	4	4.	₹.	₹,	₩,	4, 4	# <	r 4	. 4	. 4	4	4	4	4	4	4.	4.4	4.4	. 4	. 4.	4	4.	4 4	. 4	4	4	4	4.	<b>4</b> 4	4	4.	4.	4, 4	י קי	4	4.	4.	<b>1</b> . 4	4.	4	4.	4.	4.	4.	4
20000	50	20	20	200	202	20	20	0 0	2 0	0 0	200	0 0	20	20	20	20	20	70	20	20	0 0	0 0	9 0	200	70	70	70	20	20	20	50	200	0 0	202	20	50	2 50	0 0	20	20	20	50	2 6	70	20	20	200	700	20	20	50	0 0	700	20	20	20	20	20	20
0 180 0 181 0 183	C 184	c 186 c 187	c 188	0 189	C 191	c 192	c 193	C 194	c 195	C 196	0 T D	c 199	C 200	c 201	c 202	c 203	c 204	c 205	c 206	c 207	208	200	210	212	c 213	214	215	216	217	218	219	220	221	223	224	225	226	228	229	230	231	232	233	23.3	236	237	238	243	241	242	243	244	246	247	248	249	250	251	252
																																																		_									
quence 12, Appl quence 529455, quence 5, Appli quence 6, Appli	quence 5, Appli quence 6, Appli	0 0	quence 203, App	quence 150046,	Quence 159330,	quence 323331	quence 4, Appli	quence 912, App	quence 7, Appli	equence 43, Appl	equence 4, Appli	equence 44, Appl	duence 30, App.	equence 32. Appl	equence 45, Appl	guence 45761, A	guence 150045,	aguence 159329,	squence 415353,	equence 144, App	equence 55, Appl	equence 11, Appl	equence 12, Appl	equence 13, Appl	equence 14, Appl	equence 15, Appl	equence 19, Appr	equence 18. Appl	equence 19, Appl	equence 20, Appl	equence 21, Appl	equence 22, Appl	equence 23, Appl	equence 24, Appl	equence 25, Appl	equence 27, Appl	equence 28, Appl	equence 29, Appl	equence 30, App.	equence 32, Appl	equence 33, Appl	equence 34, Appl	ednence	quence	duence	guence	guence	guence	duence	duence	duence	dnence	equence	adneuce	equence	aduemos aduemos		od delice	duence
Sequence 12 Sequence 52, Sequence 5, Sequence 6,	Sequence	Sequence	Sequence	Sequence	Sequence	Seguence	Sequence	Sequence	Sequence	Sednence	Sequence	Sequence	Sequence	Seguence	Sequence	Sequence	Sequence	Sequence	Sequence	Sequence	Sequence	Sequence	Sequence	Sequence	Sequence	Sequence	Seguence	Semience	Seguence	Sequence	Sequence	Sequence	Sequence	Sequence	Seguence	Sequence	Seguence	Sequence	Sequence	Sednence	Sequence	Seguence	Sequence	Sequence	Sequence	Segmence	Someonia												
US-10-942-251-12 Sequence 12 US-10-719-956-529365 Sequence 52 US-10-160-786-5 Sequence 52 US-10-160-786-6 Sequence 64	US-10-667-022-5 Sequence US-10-667-022-6 Sequence	US-10-048-866D-10 Sequence	US-10-721-793-285 sequence	US-10-719-956-150046 Sequence	US-10-719-956-159330 Sequence	US-IO-/IX-956-529564 Sequence	US-10-083-908-75 Sequence	US-10-831-778-912 Sequence	US-10-830-287A-7 Sequence	US-10-601-140A-43 Sequence	US-10-930-301-4 Sequence	US-10-930-301-44 Sequence	US-10-930-301-98 Sequence	US-IO-664-000-3	US-10-601-140A-45 Sequence	US-10-719-956-45761 Sequence	US-10-719-956-150045 Sequence	US-10-719-956-159329 Sequence	US-10-719-956-415353 Sequence	US-10-085-906-144 Sequence	US-09-976-900A-55 Sequence	US-10-160-786-11 Sequence	US-10-160-786-12 Sequence	US-10-160-786-13 Sequence	US-10-160-786-14 sequence	US-10-160-786-15 sequence	US-IO-I00-786-16 Sequence	US-IU-I60-786-I/ Sequence	US-IO-160-786-19 Seguence	US-I0-160-786-20 Sequence	US-10-160-786-21 Sequence	US-10-160-786-22 Sequence	US-10-160-786-23 Sequence	US-10-160-786-24 Sequence	US-IU-160-/86-25 Sequence	US-10-160-786-27 Sequence	US-10-160-786-28 Sequence	US-10-160-786-29 Sequence	US-10-160-786-30 Sequence	US-IU-160-786-31 Seguence	115-10-160-786-33 Sequence	US-10-160-786-34 Sequence	US-10-160-786-35 Sequence	US-10-160-786-36 Sequence	US-10-160-786-37 Sequence	US-10-160-786-39 Sequence	US-10-160-786-40 Sequence	US-10-160-786-41 Sequence	US-10-160-786-42 . Sequence	US-10-160-786-43 Sequence	US-10-160-786-45 Sequence	US-10-160-786-46 Sequence	US-10-160-786-47 Sequence	US-10-160-786-48 sequence	US-10-160-786-49 Sequence	US-10-160-786-50 Sequence	US-10-160-786-51 Sequence	US-101-101-160-786-63 Seguence	08-10-160-180-53
942-251-12 Sequence 12 719-956-529365 Sequence 52 160-786-5 Sequence 52 160-786-6 Sequence 52	1 US-10-667-022-5 Sequence 1 US-10-667-022-6 Sequence	1 US-10-048-866D-10 Sequence	1 US-10-721-793-285 sequence	1 US-10-719-956-150046 Sequence	1 US-10-719-956-159330 Sequence	1 US-10-719-956-529564 Sequence	1 US-08-805-813-4 Sequence	1 US-10-831-778-912 Sequence	1 US-10-830-287A-7 Sequence	1 US-10-601-140A-43 Sequence	1 US-10-930-301-4 Sequence	1 US-10-930-301-44 Sequence	1 US-10-930-301-98 Sequence	1 05-10-604-000-3 1 116-10-601-1404-32 Seguence	1 113-10-601-140A-32 Sequence	1 HS-10-719-956-45761 Sequence	1 US-10-719-956-150045 Sequence	1 US-10-719-956-159329 Sequence	1 US-10-719-956-415353 Sequence	1 US-10-085-906-144 Sequence	1 US-09-976-900A-55 Sequence	1 US-10-160-786-11 Sequence	1 US-10-160-786-12 Sequence	1 US-10-160-786-13 Sequence	1 US-10-160-786-14 sequence	1 US-10-160-786-15 sequence	1 US-10-160-786-16 Sequence	1 US-10-160-786-1/ Sequence	1 US-10-160-786-19 Seguence	1 US-10-160-786-20 Sequence	1 US-10-160-786-21 Sequence	1 US-10-160-786-22 Sequence	1 US-10-160-786-23 Sequence	1 US-10-160-786-24 Sequence	1 US-10-160-786-25 Sequence	1 US-10-160-786-27 Sequence	1 US-10-160-786-28 Sequence	1 US-10-160-786-29 Sequence	1 US-10-160-786-30 sequence	1 US-10-160-786-31 Sequence	1 IIS-10-160-786-33 Sequence	1 US-10-160-786-34 Sequence	1 US-10-160-786-35 Sequence	1 US-10-160-786-36 Sequence	1 US-10-160-786-37 Sequence	1 US-10-160-786-39 Sequence	1 US-10-160-786-40 Sequence	1 US-10-160-786-41 Sequence	1 US-10-160-786-42 . sequence	1 US-IU-160-786-43 Sequence	1 US-10-160-786-45 Sequence	1 US-10-160-786-46 Sequence	1 US-10-160-786-47 Sequence	1 US-10-160-786-48 sequence	1 US-10-160-786-49 Sequence	1 US-10-160-786-50 Sequence	1 US-10-160-786-51 Sequence	1 US-10-160-786-52 Segience	T US-10-160-780 55-987-01-50 T
1 US-10-942-251-12 Sequence 12 1 US-10-179-956-529365 Sequence 52 1 US-10-160-786-5 Sequence 52 1 US-10-160-786-6 Sequence 6,	5 23 1 US-10-667-022-5 Sequence 5 23 1 US-10-667-022-6 Sequence	23 1 US-10-048-866D-10 Sequence	1 24 1 US-10-721-793-285 sequence	1 25 1 US-10-719-956-150046 Sequence	1 25 1 US-10-719-956-159330 Sequence	25 I US-IO-719-956-529564 Sequence	2/ 1 US-10-063-908-79 Sequence	21 1 US-10-831-778-912 Sequence	1 21 1 US-10-830-287A-7 Sequence	1 21 1 US-10-601-140A-43 Sequence	4 26 1 US-10-930-301-4 Sequence	1 26 1 US-10-930-301-44 Sequence	26 1 US-10-930-301-98 Sequence	22 I US-IU-804-000-3 Segmence	2 1 US-10-601-140A-32 Sequence	22 1 03-10-31 13-01 13-01 13-01 Sequence	4 25 1 US-10-719-956-150045 Sequence	4 25 1 US-10-719-956-159329 Sequence	4 25 1 US-10-719-956-415353 Sequence	4 26 1 US-10-085-906-144 Sequence	4 20 1 US-09-976-900A-55 Sequence	4 20 1 US-10-160-786-11 Sequence	4 20 1 US-10-160-786-12 Sequence	4 20 1 US-10-160-786-13 Sequence	4 20 1 US-10-160-786-14 Sequence	4 20 1 US-10-160-786-15 sequence	4 20 1 US-10-160-786-16 Sequence	4 20 1 US-10-160-786-1/ Sequence	4 20 1 03-10-160-786-19 Sequence	4 20 1 03-10-180-786-19 Sequence	4 20 1 US-10-160-786-21 Sequence	4 20 1 US-10-160-786-22 Sequence	4 20 1 US-10-160-786-23 Sequence	4 20 1 US-10-160-786-24 Sequence	4 20 I US-IU-160-786-25 Sequence	4 20 1 US-10-160-786-27 Sequence	4 20 1 US-10-160-786-28 Sequence	4 20 1 US-10-160-786-29 Sequence	4 20 1 US-10-160-786-30 sequence	4 20 I US-IO-IO-100-31 Sequence	4 20 1 US-10-160-786-33 Sequence	4 20 1 US-10-160-786-34 Sequence	4 20 1 US-10-160-786-35 Sequence	4 20 1 US-10-160-786-36 Sequence	4 20 1 05-10-160-786-3/ Sequence	4 20 1 US-10-160-786-39 Sequence	4 20 1 US-10-160-786-40 Sequence	4 20 1 US-10-160-786-41 Sequence	4 20 1 US-10-160-786-42 · sequence	4 20 1 US-10-160-43 Sequence	4 20 1 US-10-160-786-45 Sequence	4 20 1 US-10-160-786-46 Sequence	4 20 1 US-10-160-786-47 Sequence	4 20 1 US-10-160-786-48 sequence	4 20 1 US-10-160-786-49 Sequence	4 20 1 US-10-160-786-50 Sequence	4 20 1 US-10-160-786-51 Sequence	4 20 I US-IO-160-786-52 Segments	.4 20 1 US-IU-IEU-786-53 Sequence
28 1 US-10-942-251-12 Sequence 12 25 1 US-10-719-556-529365 Sequence 52 23 1 US-10-160-786-5 Sequence 52 23 1 US-10-160-786-6 Sequence 64,	0.5 23 1 US-10-667-022-5 Sequence	0.5 23 1 US-10-048-866D-10 Sequence	0.4 24 1 US-10-721-793-285 sequence	0.4 25 1 US-10-719-956-150046 Sequence	0.4 25 1 US-10-719-956-159330 Sequence	0.4 25 I US-IO-/L9-956-529564 Sequence	0.4 2/ 1 US-10-083-908-/9 Sequence	0.4 21 1 US-10-831-778-912 Sequence	0.4 21 1 US-10-830-287A-7 Sequence	0.4 21 1 US-10-601-140A-43 Sequence	0.4 26 1 US-10-930-301-4 Sequence	0.4 26 1 US-10-930-301-44 Sequence	0.4 26 1 US-10-930-301-98 Sequence	0.4 22 1 08-10-804-000-3 Sequence	0.4 22 1 03-10-601-140A-45 Sequence	0.4 25 1 US-10-719-956-45761 Sequence	0.4 25 1 US-10-719-956-150045 Sequence	0.4 25 1 US-10-719-956-159329 Sequence	0.4 25 1 US-10-719-956-415353 Sequence	0.4 26 1 US-10-085-906-144 Sequence	0.4 20 1 US-09-976-900A-55 Sequence	0.4 20 1 US-10-160-786-11 Sequence	0.4 20 1 US-10-160-786-12 Sequence	0.4 20 1 US-10-160-786-13 Sequence	0.4 20 1 US-10-160-786-14 Sequence	0.4 20 1 US-10-160-786-15 Sequence	0.4 20 1 US-10-160-786-16 Sequence	0.4 20 I US-IU-IBO-/88-I/ Sequence	0.4 20 I US-IO-160-188-18 Sequence	0.4 20 1 03-10-180-193-19 3-4-2	0.4 20 1 US-10-160-786-21 Sequence	0.4 20 1 US-10-160-786-22 Sequence	0.4 20 1 US-10-160-786-23 Sequence	0.4 20 1 US-10-160-786-24 Sequence	0.4 20 I US-IU-160-/86-25 Sequence	0.4 20 1 US-10-160-786-27 Sequence	0.4 20 1 US-10-160-786-28 Sequence	0.4 20 1 US-10-160-786-29 Sequence	0.4 20 1 US-10-160-786-30 sequence	0.4 20 I US-IO-160-786-31 Sequence	0.4 20 1 US-10-160-786-33 Sequence	0.4 20 1 US-10-160-786-34 Sequence	0.4 20 1 US-10-160-786-35 Sequence	0.4 20 1 US-10-160-786-36 Sequence	0.4 20 1 US-10-160-786-37 Sequence	0.4 20 1 US-10-160-786-39 Sequence	0.4 20 1 US-10-160-786-40 Sequence	0.4 20 1 US-10-160-786-41 Sequence	0.4 20 1 US-10-160-786-42 · Sequence	0.4 20 1 US-10-100-190 5.0	0.4 20 1 US-10-160-786-45 Sequence	0.4 20 1 US-10-160-786-46 Sequence	0.4 20 1 US-10-160-786-47 Sequence	0.4 20 1 US-10-160-786-48 sequence	0.4 20 1 US-10-160-786-49 Sequence	0.4 20 1 US-10-160*/86-50 Sequence	0.4 20 1 US-10-160-786-51 Sequented	0.4 20 I US-IO-100-126 52 Segments	0.4 20 1 US-10-160-786-53 Sequence

uence 64, Appl uence 65, Appl uence 66, Appl uence 67, Appl	ance 69,	ance 71,	ance 72,	ance 74,	ance 75,	ance /b,	ance 78,	ence 79,	ance 80,	ence 61,	970	ance 84,	ence 85,	ence 86,	ence 87,	ence 88,	ence ay,	ance 90,	ance 92.	ance 93,	ance 94,	ance 95,	ence 96,	ance 97,	ance 99.	ance 100	ance 101	ance 102	suce 103	ance 105	ence 106	ance 107	ance 108	ance 110	ance 111	ance 112,	ance 113,	ance 115,	ance 116,	snce 117,	nce 119,	ance 120,	nce 121,	nce 122,	ance 123,	nce 124,	nce 126,	ence 127,	ance 128,	ance 130,	ance 131,	ance 132,	suce 133,	ence 134,	ance 135
77-022-64 Seque 77-022-65 Seque 77-022-66 Seque 77-022-67 Seque 77-022-68 Seque	90	71.	-72	-74	-75	-72	-78	-79	-80	18.	. מ יי	4.00	-85	-86	-87	80	200	06.	. 6.	-93	-94	-95	96.	7 0	06	100	-101	-102	103	105	-106	-107	108	110	-111	-112	-113	-115	-116	-117	611.	120	-121	-122	123	124	126	-127	-128	129	131	-132	-133	-134	135
20 1 US-10-667 20 1 US-10-667 20 1 US-10-667 20 1 US-10-667 20 1 US-10-667	1 US-10-66	1 US-10-66	1 US-10-66	1 US-10-66	1 US-10-66	1 US-10-66	1 US-10-66	1 US-10-66	1 US-10-66	1 US-10-66	99-01-50 1	1 US-10-66	1 US-10-66	1 US-10-66	1 US-10-66	1 US-10-66	19-01-911 t	99-01-50 1	1 US-10-66	115-10-6	1 US-10-66	1 US-10-66	1 US-10-66	1 US-10-66	1 US-10-66	1 US-10-6	1 US-10-6	1 US-10-66	1 US-10-66	1 US-10-66	1 US-10-66	1 112-10-66	1 US-10-66	1 US-10-66	1 US-10-66	1 113-10-6	1 US-10-66	1 US-10-6	1 US-10-66	1 US-10-66	1 US-10-66	1 US-10-66	01-01-01												
44444	. 4. 4	. <del>4</del> .	4. <	. 4.	4.	a. 4	. 4.	4.	4.	<b>4</b> . 4	. d	. 4.	4.	4.	4.	d	4. 4	. d	. 4	4.	4.	4.	4.	4. 4	. 4	. <del>4</del> .	4.	4.	4. 4	ŗ 4	4.	4.	4. 4	r 4	4.	4.	<b>ت</b>	. 4.	4.	4.	i. 4	. 4	. 47	4.	4.	4. <	. 4.	4.	4.	4. 4	. 4.	4.	4.	4. 4	<b>ت</b> ح
G 326 G 327 G 328 G 329 G 339	331	333	334	336	337	338	340	341	342	343	145	346	347	348	349	350	101	2 5	1 4	55	99	57	æ (	n (	2 1	25	63	64	2 4	67	89	69	0.5	12	73	4.	ر ر م	7.2	78	62	0 1	82	83	84	85	9 2	. 88	83	8 :	1 6	33.5	94	500	96	. 0
0.0.0.0.0		D. O.	0.0	. 0.	0.	o. r	. n	· ·	·				_														_			4																					_				
Sequence 128, App Sequence 129, App Sequence 130, App Sequence 131, App Sequence 131, App	ance 133,	ance 135,	ence 136,	ance 138,	ance 139,	ence 140,	ance 142,	ence 143,	ence 144,	ance 145,	ance 140,	ence 11,	ence 12,	ence 13,	ence 14,	ence 15,	ence 15,	ance 17,	ance 19.	ence 20,	ance 21,	ence 22,	ance 23,	ence 24,	ance 25,	ence 27,	ence 28,	ance 29,	ence 30,	ance 32,	ence 33,	ence 34,	ence 35,	ance 37,	ence 38,	ence 39,	ence 40,	ence 42,	ence 43,	ence 44,	ence 45,	ence 47,	ence 48,	ence 49,	ence 50,	ence 51,	ence 53.	ance 54,	ence 55,	ence 56,	ance 58,	ence 59,	ence 60,	ence 61,	ence 62,
US-10-160-786-128 US-10-160-786-129 US-10-160-786-130 US-10-160-786-131 US-10-160-786-131	-10-160-786-13	S-10-160-786-13	S-10-160-786-13 S-10-160-786-13	8-10-160-786-13	8-10-160-786-13	S-10-160-786-14 S-10-160-786-14	8-10-160-786-14	5-10-160-786-14	S-10-160-786-14	S-10-160-786-14 S-10-160-786-14	S-10-160-186-14	5-10-667-022-11	S-10-667-022-1	8-10-667-022-1	8-10-667-022-1	S-10-667-022-1	5-10-66/-022-1	5-10-667-022-1	S-10-667-022-1	8-10-667-022-2	S-10-667-022-2	S-10-667-022-2	S-10-667-022-2	S-10-667-022-2	8-10-667-022-2	8-10-667-022-2	8-10-667-022-2	5-10-667-022-2	S-10-667-022-3	S-10-667-022-3	S-10-667-022-3	S-10-667-022-3	S-10-667-022-3 S-10-667-022-3	S-10-667-022-3 S-10-667-022-3	S-10-667-022-3	8-10-667-022-3	S-10-667-022-4 S-10-667-022-4	S-10-667-022-4	8-10-667-022-4	S-10-667-022-4	5-10-667-022-4	S-10-667-022-4	8-10-667-022-4	S-10-667-022-4	S-10-667-022-5	S-10-667-022-5	S-10-667-022-5	S-10-667-022-5	8-10-667-022-5	S-10-667-022-5 S-10-667-022-5	S-10-667-022-5	S-10-667-022-5	8-10-667-022-6	S-10-667-022-6	0-667-022-6
7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7																																																							
00000 44444									•					•									•						•			•					•		•	•	•				•	•				•			•	•	
00000	200	200	200	20	200	2 0	20	20	20	2 6	2 6	25	20	50	200	0 0	9 6	0 0	202	20	20	20	9 0	0 0	0 0	202	20	20	0 0	70	20	50	9.0	700	20	50	2 6	202	20	20	2 0	0 0	20	70	50	0 0	700	20	50	0 0	200	20	50	0 6	70
255 255 255 255 256			_ ^															_																																					

qđ
4.rn
022-
- 199
-10-
gibbs
٠.

Sequence 14, Appl Sequence 33, Appl Sequence 29731, A Sequence 15, Appl	aguence 6 aguence 6	equence 8	equence 8	equence 1	equence 1	equence 1			6	20	7 6	3 5	93	5	7 5	6	2	74	10	27	., α	ີດີ	10	707	7	22	32	Sequence 34, Appl	1 E	85	, 4 ,	34	34	336	e .	v, v	equence 6,	equence 6,	equence 5,	equence 6,	equence 28	- 5	equence 30	equence 2	equence 23	equence 1	equence 77	equence 7	equence 2
US-10-728-078-14 US-10-620-642-33 US-10-831-901A-297 US-10-469-881-15	US-10-719-900-64231 US-10-831-778-61 US-10-719-900-51670	US-10-719-900-899	US-10-719-900-89925 US-10-809-189-82442	US-10-809-189-108	US-10-809-189-11980	US-10-719-956-18586	US-10-719-956-45534	US-10-719-956-643	US-10-831-901A-2973	US-10-374-366-201	US-1	1-80	US-1	US-1	US-1	US-1	US-1	US-1	US-1	US-1	US-1	18-1	US-1	US-1	US-1	US-1	US-1	US-1	US-1	US-10-920-612-850	US-1	us-1	US-1	US-C	us-1	us-c	Sn O-Sn	ns-(	US-1	. SD	s S	Sn	OS - SI	a SD	ns-	ns-	SD C	US-10-667-022-72	US-
2000																																																	
																																										m							
4444	4.4.4	0 0	4. 4	0	4.0	. 4	0.4	4.0	0.0	0 0	0.4	0.0	0 0	0.4	4.0	4.0	. 4	4.0	4.4	. 4.	0	0.0	0 0	0.0	00	0	0 0		00		0		0	0 0		0			0.0	0 0		0	0 0		0	0	0 0		
110000			18.8								18	18	9 FB	18	18	18	1 1	18	18	9 G	18	18	18	18	18	18	1 1 8 8 4	18	17.8	17.4	, ·	: .		۲.	17.2	Н.	17	17	17	17	17	17	17	17	17	17	٦,		16.8
C 472 C 473 C 475 476	C 477 C 478			483	484	485		c 488			492	c 493	0 4 4 9 4 4 9 4	c 496	c 497	c 498	ים מים מים	c 501	c 502	C 503	c 505	c 506	c 508	509	c 510	512	513	c 515	c 516	517	c 519	520	c 522	523	c 524	526	527	529	530	531	533 C 533	c 534	535	C 536	c 538	c 539	540	542	c 543
		_														_							_										-		<u></u> ,		<u>.                                    </u>		. <u>-</u>					_		_			
6 8 8 4 4	44	4 4	4:	40	ī	ลีเ	56, App	m	-	•	٠.		, Appli	٠.	- 0	m	4. (	5 4	9, Appl	0 0	ν o	0.0	2 2	3 6	4.	3 12	2	ຂູ	E .	ຕູເ	. 4	50 5	9 0	4	5	Sequence 60	Sequence 76	Sequence 76	Sequence 22	Sequence	Sequence		Sequence	Sequence	Sequence	Sequence	Sequence	Sequence 1, Appli	Sequence 24, Appl
US-10-667-022-137 Sequence 13 US-10-667-022-138 Sequence 13 US-10-667-022-139 Sequence 14 US-10-667-022-140 Sequence 14 INS-10-667-022-141 Sequence 14	US-10-667-022-142 Sequence 142 US-10-667-022-143 Sequence 143	US-10-667-022-144 Sequence 144	US-10-667-022-146 Sequence 146	US-10-667-022-147 Sequence 14	US-10-661-415-15 Sequence 15	US-10-831-778-226 Sequence 22	US-10-831~778-556 Sequence 550, App	US-10-728-078-23 Sequence 23	US-10-601-140A-1 Sequence 1,	US-10-601-140A-2 Sequence 2,	US-10-601-140A-3 Sequence 3, US-10-601-140A-4 Sequence 4,	US-10-601-140A-6 Sequence 6,	US-10-601-140A-7 Sequence 7, Appli	US-10-601-140A-8 Sequence 8,	US-IU-601-140A-9 Sequence 70	US-10-601-140A-23 Sequence 23	US-10-601-140A-34 Sequence 34	US-10-601-140A-40 sequence 40	US-10-876-086-49 Sequence 49, Appl	US-10-831-901A-29732 Sequence 29	US-10-831-901A-29733 Sequence 29	US-10-831-901A-29735 Sequence 29	US-10-831-901A-29736 Sequence 29	US-10-789-831-22 Sequence 23	US-10-789-831-24 Sequence 24	US-10-661-402-12 Sequence 12 HS-10-661-402-15 Sequence 15	US-10-847-502-10 Sequence 10	US-10-847-502-15 Sequence 15	US-10-913-246-23 Sequence 23	US-10-934-890-23 Sequence 23	US-10-394-388A-8 US-10-688-299-54 Sequence 54	US-10-681-773-75257 Sequence 75	US-09-776-479-60 Sequence 60	US-10-112-653-54 Sequence 54	US-10-017-995-60 Sequence 60	US-10-314-5/8-60 Sequence of tIS-10-831-778-60 Sequence 60	US-10-098-263B-76253 Sequence 76	US-10-098-263B-76254 Sequence 76	US-10-719-900-18911 Sequence 10 US-10-719-900-228029 Sequence 22	US-10-719-900-228030 Sequence	US-10-719-900-286591 Sequence	US-10-719-900-334399 Sequence US-10-719-900-872675 Sequence	US-10-719-900-872676 Sequence	US-10-719-900-956708 Sequence	US-10-719-956-68653 Sequence	US-10-719-956-467347 Sequence	US-10-719-956-520734 Sequence	US-10-760-940-1 Sequence	US-10-913-246-24 US-10-934-890-24 Sequence
1 US-10-667-022-137 Sequence 13: 1 US-10-667-022-138 Sequence 13: 1 US-10-667-022-140 Sequence 14: 1 US-10-667-022-140 Sequence 14: 1 US-10-667-022-141 Sequence 14:	1 US-10-667-022-142 Sequence 142 1 US-10-667-022-143 Sequence 143	1 US-10-667-022-144 Sequence 144	1 US-10-667-022-146 Sequence 146	1 US-10-667-022-147 Sequence 14	1 US-10-661-415-12 Sequence 15	1 US-10-831-778-226 Sequence 220	1 US-10-831-778-556 Sequence 550, App.	1 US-10-728-078-23 Sequence 23	1 US-10-601-140A-1 Sequence 1,	1 US-10-601-140A-2 Sequence 2,	1 US-10-601-140A-3 Sequence 4,	1 US-10-601-140A-6 Sequence 6,	1 US-10-601-140A-7 Sequence 7, Appli	1 US-10-601-140A-8 Sequence 8,	1 US-10-601-140A-9 Sequence 10	1 US-10-601-140A-23 Sequence 23	1 US-10-601-140A-34 Sequence 34	1 US-10-601-140A-40 sequence 40	1 US-10-876-086-49 Sequence 49, Appl	1 US-10-831-901A-29732 Sequence 29	1 US-10-831-901A-29733 Sequence 29 1 US-10-831-901A-29734 Sequence 29	1 US-10-831-901A-29735 Sequence 29	1 US-10-831-901A-29736 Sequence 29	1 US-10-789-831-22 1 US-10-789-831-23 Sequence 23	1 US-10-789-831-24 Sequence 24	1 US-10-661-402-12 Sequence 12 1 US-10-661-402-15 Sequence 15	1 US-10-847-502-10 Sequence 10	1 US-10-847-502-15 Sequence 15	1 US-10-913-246-23 Sequence 23	1 US-10-934-890-23 Sequence 23	1 US-10-394-388A-8 Sequence 54	1 US-10-681-773-75257 Sequence 75	1 US-09-776-479-60 sequence of	1 US-10-112-653-54 Sequence 54	1 US-10-017-995-60 Seguence 60	1 US-10-314-5/8-60 Sequence of	1 US-10-098-263B-76253 Sequence 76	1 US-10-098-263B-76254 Sequence 76	1 US-10-719-900-18911 Sequence 10 US-10-719-900-228029 Sequence 22	1 US-10-719-900-228030 Sequence	1 US-10-719-900-286591 Sequence	1 US-10-719-900-334399 Sequence 1 US-10-719-900-872675 Sequence	1 US-10-719-900-872676 Sequence	1 US-10-719-900-956708 Sequence	1 US-10-719-956-68653 Sequence	1 US-10-719-956-467347 Sequence	1 US-10-719-956-520734 Sequence	1 US-10-760-940-1 Sequence	1 US-10-913-246-24 Sequence 1 US-10-934-890-24 Sequence
20 1 US-10-667-022-137 Sequence 134 20 1 US-10-667-022-138 Sequence 135 20 1 US-10-667-022-140 Sequence 135 20 1 US-10-667-022-140 Sequence 145 20 1 US-10-667-022-140 Sequence 146	20 1 US-10-667-022-142 Sequence 147 20 1 US-10-667-022-143 Sequence 147	1 20 1 US-10-667-022-144 Sequence 144	20 1 US-10-667-022-146 Sequence 146	1 20 1 US-10-667-022-147 Sequence 14	1 20 1 US-10-661-415-12 Sequence 15	1 20 1 US-10-831-778-226 Sequence 22	20 I US-110-81-7/8-556 Sequence 550. App	20 1 US-10-728-078-23 Sequence 23	4 20 1 US-10-601-140A-1 Sequence 1,	4 20 1 US-10-601-140A-2 Sequence 2,	4 20 1 US-10-601-140A-3 Sequence 4,	4 20 1 US-10-601-140A-6 Sequence 6,	4 20 1 US-10-601-140A-7 Sequence 7, Appli	4 20 1 US-10-601-140A-8 Sequence 8,	4 20 I US-IU-60I-I40A-9 Sequence 37	4 20 1 US-10-601-140A-23 Sequence 23	4 20 1 US-10-601-140A-34 Sequence 34	4 20 1 US-10-601-140A-40 sequence 40	4 20 1 US-10-876-086-49 Sequence 49, Appl	4 20 1 US-10-831-901A-29732 Sequence 29	4 20 1 US-10-831-901A-29733 Sequence 29	4 20 1 US-10-831-901A-29735 Sequence 29	4 20 1 US-10-831-901A-29736 Sequence 29	4 20 1 US-10-789-831-22 Sequence 23 4 20 1 US-10-789-831-23 Sequence 23	4 20 1 US-10-789-831-24 Sequence 24	4 20 1 US-10-661-402-12 Sequence 12	4 20 1 US-10-847-502-10 Sequence 10	4 20 1 US-10-847-502-15 Sequence 15	4 21 1 US-10-913-246-23 Sequence 23	4 21 1 US-10-934-890-23 Sequence 23	4 24 1 US-10-394-388A-9 Sequence 54 4 25 1 US-10-688-299-54 Sequence 54	4 25 1 US-10-681-773-75257 Sequence 75	4 24 1 US-09-776-479-60 sequence of	4 24 1 US-112-653-54 Sequence 54	24 1 US-10-017-995-60 Sequence 60	4 24 1 US-10-314-5/8-60 Sequence of	4 25 1 US-10-098-263B-76253 Sequence 76	4 25 1 US-10-098-263B-76254 Sequence 76	4 25 1 US-10-/19-900-18911 Sequence 20 4 25 1 US-10-719-900-228029 Sequence 22	4 25 1 US-10-719-900-228030 Sequence	4 25 1 US-10-719-900-286591 Sequence	4 25 1 US-10-719-900-334399 sequence	4 25 1 US-10-719-900-872676 Sequence	4 25 1 US-10-719-900-956708 Sequence	4 25 1 US-10-719-956-68653 Sequence	4 25 1 US-10-719-936-369328 Sequence	4 25 1 US-10-719-956-520734 Sequence	.4 19 1 US-10-760-940-1 Sequence	.4 19 1 US-10-913-246-24 Sequence .4 19 1 US-10-934-890-24 Sequence
US-10-667-022-137 Sequence 137 US-10-667-022-138 Sequence 138 US-10-667-022-139 Sequence 136 US-10-667-022-140 Sequence 147 INS-10-667-022-141 Sequence 147	0.4 20 1 US-10-667-022-142 Sequence 14: 0.4 20 1 US-10-667-022-143 Sequence 14:	0.4 20 1 US-10-667-022-144 Sequence 144	0.4 20 1 US-10-667-022-146 Sequence 146	0.4 20 1 US-10-667-022-147 Sequence 14	0.4 20 1 US-10-661-415-15 Sequence 15	0.4 20 1 US-10-831-778-226 Sequence 22	0.4 20 1 US-10-831-/VB-556 Sequence 320, APP	0.4 20 1 US-10-728-078-23 Sequence 23	0.4 20 1 US-10-601-140A-1 Sequence 1,	0.4 20 1 US-10-601-140A-2 Sequence 2,	0.4 20 1 US-10-601-140A-3 Sequence 4,	0.4 20 1 US-10-601-140A-6 Sequence 6,	0.4 20 1 US-10-601-140A-7 Sequence 7, Appli	0.4 20 1 US-10-601-140A-8 Sequence 8,	0.4 20 1 US-10-501-140A-9 Sequence 10	0.4 20 1 US-10-601-140A-23 Sequence 23	0.4 20 1 US-10-601-140A-34 Sequence 34	0.4 20 1 US-10-601-140A-40 Sequence 40	0.4 20 1 US-10-876-086-49 Sequence 49, Appl	0.4 20 1 US-10-831-901A-29732 Sequence 29	) 0.4 20 1 US-10-831-901A-29733 Sequence 29	0.4 20 1 US-10-831-901A-29735 Sequence 29	0.4 20 1 US-10-831-901A-29736 Sequence 29	0.4 20 1 US-10-789-831-22 Sequence 23	0.4 20 1 US-10-789-831-24 Sequence 24	0.4 20 1 US-10-661-402-12 Sequence 12	0.4 20 1 US-10-847-502-10 Sequence 10	) 0.4 20 1 US-10-847-502-15 Sequence 15	0.4 21 1 US-10-913-246-23 Sequence 23	0.4 21 1 US-10-934-890-23 Sequence 23	0.4 24 1 US-10-394-388A-8 Sequence 54	9.8 0.4 25 1 US-10-681-773-75257 Sequence 75	3.2 0.4 24 1 US-09-776-479-60 sequence of	9.2 0.4 24 1 US-10-112-653-54 Sequence 54	9.2 0.4 24 1 US-10-017-995-60 Sequence 60	9.2 0.4 24 1 US-10-314-5/8-50 Sequence of	9.2 0.4 25 1 US-10-098-263B-76253 Sequence 76	9.2 0.4 25 1 US-10-098-263B-76254 Sequence 76	9.2 0.4 25 1 US-10-719-900-18911 Sequence 20	9.2 0.4 25 1 US-10-719-900-228030 Sequence	9.2 0.4 25 1 US-10-719-900-286591 Sequence	0.4 25 1 US-10-719-900-334399 Sequence	9.2 0.4 25 1 US-10-719-900-872676 Sequence	9.2 0.4 25 1 US-10-719-900-956708 Sequence	9.2 0.4 25 1 US-10-719-956-68653 Sequence	9.2 0.4 25 1 US-10-719-956-369328 Sequence	9.2 0.4 25 1 US-10-719-956-520734 Sequence	0.4 19 1 US-10-760-940-1 Sequence	0.4 19 1 US-10-913-246-24 Sequence 0.4 19 1 US-10-934-890-24 Sequence

0, App 0, App 87, Ap	, App	Appl	3, App	Appli	Appli	Appli	Appli	day.	3. App	Appli	Appli	Appl	Appl	7 200	Appl	Appli	3, App	87, Ap	187, A	186, A	/27, A	Appl	, Appi	, מלקים קינים	77. An	Appli	9, App	348, A	350, A	33, Ap	32, Ap	76, AD	27. A	381, A	329, A	385, A	564, A	300, A	7. An	5, Ap	Appl	App	App	App]	Appl	Appl	Appl	Appl	Appli	Appl	70, AD	400	Appl	Appl	Appl	App1	, App	App1
Sequence 100 Sequence 836 Sequence 415	54(	1,3	148	296	6	'n,	6	7 0	7	'n	ທັ	១១	7 0	5	7	'n	13	16	51	21	2,5	20.4	9 4	יי ב	5	0	n	н	-	н.	N 1	٠.	٠.	ı N	~	9	4 س	4 4		'n	9	o o	Sequence 353	ŋσ	0	9	4	9	Ġ	;;	ខិច	, -	86	98	Sequence 29,	23	22.0	9
US-10-225-023-100 US-10-225-023-838 US-10-349-143-4157	US-10-883-218-158 US-10-883-218-540	US-10-892-922-73 US-10-892-922-166	US-10-923-580-148	US-10-923-580-296 US-09-453-234-4	US-09-908-671-6	US-10-094-546-1	US-10-148-844-6	US-10-218-634-143	US-10-262-439-143	US-10-167-241-3	US-10-108-732-5	US-10-362-817-13	US-10-1/3-/18-19 116-10-173-718-89	US-10-10-110-1107	US-10-292-337-71	US-10-479-510-1	US-10-476-021-138	US-10-466-894-1687	US-10-831-901A-21487	US-10-831-901A-21488	US-10-831-901A-29727	US-IU-704-263-84	US-10-825-593-48	118-10-331-280-187	US-10-349-143-8727	US-10-479-510-2	US-10-786-720-379	US-10-786-720-14848	US-10-786-720-14850	US-10-751-736-1933	US-10-751-736-2182	US-10-751-736-7896	115-10-751-736-18927	US-10-751-736-21281	US-10-751-736-21929	US-10-751-736-23285	US-10-751-736-36664	US-10-751-736-4465U	US-10-/31-/36-464/2 US-10-847-918-3467	US-10-847-918-5165	US-09-780-533A-63	US-09-780-533A-962	US-US-VSU-533A-963 11C-10-333-400-300	115-09-752-639-98	US-09-984-198-98	US-10-238-443-65	US-10-188-404-49	US-10-309-362-65	US-10-260-451-6	US-10-008-789-12	US-10-349-143-6200 TR-10-620-622-0	US-10-620-332-3	US-10-967-092-98	US-11-011-500-98	US-10-872-645-29	US-10-160-786-59	US-10-160-786-127	US-10-667-022-59
																																										•																
9 6 6 6 6	1 2		57	7 13	×	~	× ×	, v	¥ %	ñ	8	~ ~	ς <sub>ζ</sub>		ž	20	ĕ	×	ă	ă	N d	N C	v 6	4.5	2 :	2	73	5	2	5	5 6	7.6	3.5	2	2	22	5.5	7 5	3 5	2	H	7	7 -	7 2	7	ä	5	8	×	2 2	۲ ک	46	3 2	i ~	11	ξ,	ă č	4
												•						•	•		•																													-						•		٠
11. 15. 15. 15. 15. 15. 15. 15. 15. 15.			٠.				-, -	•		٠.	٠.	٠, ١				٠.	٠.	٦.	٦.					•			٠.	٠.	٦.	٦.			•		٦.	٠.	٠, ٠		•	٠.	٦.	15.4	15.4	15.4	15.4	15.4	15.4	15.4	15.4	15.4	4.51	1.2	15.4	15.4	15.2	15.2	15.2	15.2
c 620 c 620 c 621		624 625		c 627				200				c 637		640	641	642	c 643			c 646		9 6	, d , d , d		652	653	c 654	655	c 656	657	929		. 199		663						c 670			674	675		c 677		619		189			685	989 0		C 688	פאע
																							٠																												<b>3</b>							
112, App 114, App 12304, A	2 10	14784, A 18930, A	ö	กัก	้เจ๋	~ i	Νõ	, ,				22	Šč	29. Appl	57, Appl	22, Appl	153, App	390, App	12305, A	53486, A	3425, Ap	zs, Appi	20, APP1	3345, Ap	3371. Ap	4045, Ap	4047, Ap	4073, Ap	4783, Ap	4785, Ap	48II, AD	13221, A	13757, A	13758, A	14484, A	17384, A	18572, A	1936, Ap	5694. An	19985, A	48150, A	23, Appl	94, Appl	3. Appli	4. Appli	5, Appli	5, Appli	34, Appl	34, Appl	44, Appl	233, APP	376 App	377, App	6. Appli	12, Appl	6	424	426
Sequence													Seguence	Semence	Sequence	Sequence	Sequence	Sequence	Sequence	Sequence	Sequence	Sednence	Seguence	Segrence	Segmence	Sequence	Sequence		Sequence	Sequence	Sequence	Seguence	Semience	Sequence	Sequence	Sequence	Sequence	sednence	Sequence	Sequence	Sequence	Sequence	Sequence	Seguence	Sequence	Sequence	ance	ence	ence	ence	ance	מולים מו	nce	ance	ence	ance	ence	adience
-112 -114 -123	-5549	5-14784 5-18930	-3692	2-52	5-52	3-41	3-52 3-52	A-477	19-	1-7	7-162	7-328	404 - 404	25.	1-57	A-22	3A-153	-390	-123	-5348	1442	LA-23	97.	-334	-337	-404	-404	-407	-478	-478	1194-	-1322	-1375	-1375	)-14484	-1738	-1857		-569	-199	-4815	5-23	3-74 3-643	5 ~	. 4-8	2-5	3A-5	2A-34	2-34	5-44	3-233 5-25	A-37	2A-377	9-e	5A-12	-36	3-3424	-342
US-10-786-720 US-10-786-720 US-10-786-720	-10-751-7	-10-751-73 -10-751-73	-10-751-73	-09-972-17	-10-855-5	-10-473-68	-10-999-16	10-872-01-	-10-872-96	-10-872-98	-10-800-46	-10-800-48	-10-8/1-2/	-10-454-22	-10-476-02	-09-802-32	-10-004-37	-10-428-27	-10-786-72	-10-751-73	10-84/-91	10-105-10-10-10-10-10-10-10-10-10-10-10-10-10-	-10-431-33	-10-786-73	-10-786-72	-10-786-72	-10-786-72	-10-786-72	-10-786-72	-10-786-72	-10-/86-/-	-10-/86-/-	-10-786-72	-10-786-72	-10-786-72	-10-786-72	-10-786-72	-10-751-73	-10-751-73	-10-751-73	-10-751-73	-10-839-68	-TO-52-TT	-10-608-86	-10-608-86	-10-608-86	-09-380-72	-09-945-95	-10-233-94	-10-316-75	3/-5T/-OT-	-10-601-80	-10-644-0	-09-928-7	-09-928-7	-10-871-30	-10-847-91	-10-847-91
2222	21	21	21	7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7	22	22	22 0	9 6	18	18	19	13	4 -	20	50	21	21	21	21	5.5	7.5	7 10	7 5	217	21	21	21	21	21	21	7 5	7 [	21	21	21	21	12.5	7 [	7 2	21	21	21	1 1	17	17	17	70	20	20	50	9 6	200	202	21	21	21	21	17
0000					•	•	٠	٠		•	•	•				•		•			•	•	•				•	•	٠		•	•			•	•	٠	•		•	•	•						٠	٠	•	•					•	•	٠
16.8			٠.		9	٠.	٠, ۵		16.4	16.4	16.4	16.4	16.4	16.4	16.4		16.4	٠	٠.	٠.	• •	• u				6	ė.	ė.	. 0	6	• •	• u		6	ė.	٠.	٠,			6	•	٠,	9 4	16	16	16	16	16	16	16	9 4	91	91	91	16	16	91	97
0 546 547 548			c 553	55 55 55		c 557	2 2 2 3 3	560	561	295	563	564	266	567	568	269	570	571	572	573	4,4	טיני	27.0	578	579	580	581		583	584		0 u	588	583	290	591	260	0 0 0 0 0 0	595	596	597	860	600	601	c 602	603	604	605		c 607	900		c 611		613	614	615	919

0 0000 0 0 0 00 00 00

C 764 15.2 0.3 20 1 US-10-831-901A-3732 Sequence 3732, Ap c 765 15.2 0.3 20 1 US-10-831-901A-3733 Sequence 3733, Ap c 766 15.2 0.3 20 1 US-10-831-901A-5057 Sequence 5057, Ap Sequence 15.2 0.3 20 1 US-10-831-901A-15730 Sequence 15.0 0.3 20 1 US-10-831-901A-15730 Sequence 13606, A Sequence 15.2 0.3 20 1 US-10-831-901A-15730 Sequence 13730, A C 769 15.2 0.3 20 1 US-10-831-901A-2083 Sequence 21493, A 772 15.2 0.3 20 1 US-10-831-901A-23489 Sequence 21493, A 772 15.2 0.3 20 1 US-10-831-901A-2346 Sequence 21493, A 774 15.2 0.3 20 1 US-10-831-901A-2346 Sequence 27352, A 775 15.2 0.3 20 1 US-10-831-901A-2346 Sequence 27352, A 775 15.2 0.3 20 1 US-10-831-901A-27352 Sequence 27352, A 775 15.2 0.3 20 1 US-10-831-901A-27352 Sequence 27352, A 775 15.2 0.3 20 1 US-10-831-901A-27355 Sequence 27352, A 775 15.2 0.3 20 1 US-10-831-901A-27355 Sequence 27352, A 775 15.2 0.3 20 1 US-10-831-901A-27355 Sequence 27352, A 778 15.2 0.3 20 1 US-10-831-901A-27355 Sequence 27017, A 2779 15.2 0.3 20 1 US-10-831-901A-29726 Sequence 30017, A 2779 15.2 0.3 20 1 US-10-831-901A-29726 Sequence 245, Appli C 781 15.2 0.3 20 1 US-10-831-901A-29726 Sequence 245, Appli C 781 15.2 0.3 20 1 US-10-831-901A-39726 Sequence 245, Appli C 782 15.2 0.3 20 1 US-10-831-901A-39726 Sequence 245, Appli C 782 15.2 0.3 20 1 US-10-831-901A-39726 Sequence 245, Appli C 782 15.2 0.3 20 1 US-10-831-901A-305 Sequence 245, Appli C 782 15.2 0.3 20 1 US-10-831-901A-305 Sequence 245, Appli C 782 15.2 0.3 20 1 US-10-831-901A-305 Sequence 305, Appli C 782 15.2 0.3 20 1 US-10-831-901A-305 Sequence 305, Appli C 782 15.2 0.3 20 1 US-10-831-9034-305 Sequence 305, Appli C 782 15.2 0.3 20 1 US-10-831-9034-305 Sequence 305, Appli C 782 15.2 0.3 20 1 US-10-831-9034-305 Sequence 305, Appli C 782 15.2 0.3 20 1 US-10-831-9034-305 Sequence 305, Appli C 782 15.2 0.3 20 1 US-10-831-9034-305 Sequence 305, Appli C 782 15.2 0.3 20 1 US-10-831-9034-305 Sequence 305, Appli C 782 15.2 0.3 20 1 US-10-831-9034-305 Sequence 305, Appli C 782 15.2 0.3 20 1 US-10-831-9034-305 Sequence 305, Appli C 782 15.	RESULT 1 US-09-908-975-10633 US-09-908-975-10633 Sequence 10633, Application US/09908975 Sequence 10633, Application US-0908975 Sequence 10633 APPLICANT: MINIZ, Elia APPLICANT: MINIZ, Elia APPLICANT: MINIZ, Liat APPLICANT: MINIZ, MINIZ, LIAT APPLICANT: MINIZ, MINIZ, LIAT APPLICANT: MINIZ, LIAT APPLICANT: MINIZ, MINIZ, LIAT APPLICANT: MINIZ, MINIZ, LIAT APPLICANT: MINIZ, MI	CORGANISM: HOMO Sapleins  US-09-908-975-10633  QUELY MATCH  DEST LOCAL Similarity 100.0%; Pred. No. 0.37;  MATCHES 60; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  MATCHES 60; CONSERVATIVE 0; Mismatches 0; Indels 0; Gaps 0;  QY 4290 CGTCCATGGTATCTACTGTAGTCCTGCAGATGGAATCCTACTACTACTACTGCTGCTC 4349  QY 4290 CGTCCATGGTATCTACTGTAGTCCTGCAGATGGAAATCCTATCTACTACTACTGCTGCTC 60  RESULT 2  US-10-431-627-3/c  US-10-431-627-3/c  SEQUENCE 3, Application US/10431627  PAPLICANT: Keen, Randy  APPLICANT: Keen, Randy  APPLICANT: Keen, Randy  APPLICANT: Keen, Randy  TITLE OF INVENTION: Apparatus For the Automated Synthesis of  TITLE OF INVENTION: Polynucleotides  FILE REPERENCE: 6663-031(EA5438)  CURRENT PILING DATE: 2003-05-06
Sequence 245, App Sequence 177, App Sequence 305, App Sequence 15, Appl Sequence 11, Appl Sequence 61, Appl Sequence 61, Appl Sequence 619, Appl Sequence 125, Appl Sequence 125, Appl Sequence 14, Appl Sequence 56, Appl Sequence 51, Appl Sequence	1 W 8 1 8 1 4 1 4 W 1 4 V 1 4 V 1 8 V 1 W 1 W 1 W 1 W 1 W 1 W 1 V 1 W 1 V 2 V 1 W 1 W 1 W 1 W 1 W 1 W 1 W 1 W 1 W 1	Sequence 153, App Sequence 273, App Sequence 639, App Sequence 859, App Sequence 374, App Sequence 374, App Sequence 102, App Sequence 102, App Sequence 639, App Sequence 639, App Sequence 639, App Sequence 597, App Sequence 597, App Sequence 597, App Sequence 549, App Sequence 1494, App Sequence 1496, App Sequence 1496, App Sequence 1496, App Sequence 1496, App Sequence 1496, App Sequence 1496, App
0.5 - 0.0 -	US-10-263-655-15 US-10-160-497-81 US-10-160-497-81 US-10-160-497-81 US-10-160-497-81 US-10-160-497-138 US-10-348-750-81 US-10-348-750-138 US-10-175-492-120 US-10-175-492-120 US-10-189-268-109 US-10-189-268-109 US-10-189-268-109 US-10-189-648-133 US-10-199-676-65 US-10-199-199-199-199-199-199-199-199-199-	- Sn - Sn
		000000000000000000000000000000000000000
0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0

```
Sequence 1, Application US/10463574A
Sequence 1, Application US/10463574A
Sequence 1, Application No. US20040259088A1
GENERAL INFORMATION:
GENERAL INFORMATION:
APPLICANT: Takase, Hiromitsu
APPLICANT: Hashimoto, Hiromuki
TITLE OF INVENTION: A Method for Analyzing RNA Using Time of Flight Secondary Ion Mass
TITLE OF INVENTION: Spectrometry
FILE REFERENCE: 03560.003311
TITLE OF INVENTION: MUMBER: US/10/463,574A
CURRENT FILING DATE: 2003-66-18
PRIOR APPLICATION UNMBER: 2002-06-28
NUMBER OF SEQ ID NOS: 2
SEQ ID NO 1
LENGTH: 40
                                                                                                                                                                                                                                                                                                                                                      ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ö
                                                                                                                                                                                                                                                                                                                                                      Gape
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Gapa
                                                                                                        FEATURE:
    OTHER INFORMATION: Description of Artificial Sequence: Synthetic OTHER INFORMATION: 011gonucleotide US-10-661-415-20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        OTHER INFORMATION: Description of Artificial Sequence: Synthetic; CTHER INFORMATION: oligonucleotide
                                                                                                                                                                                                                                                                                                                                                      ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       GENERAL INFORMATION:
APPLICANT: VALLLANT, ANDREW
APPLICANT: VALLLANT, ANDREW
APPLICANT: VALLLANT, ANDREW
APPLICANT: UTTALU JEAN-MARC
TITLE OF INVENTION: ANTIVIRAL CLICGONUCLEOTIDES TARGETING RSV
FILE REFERENCE: 029849/0205
CURRENT PAPLICATION NUMBER: US/10/661,415
CURRENT FILING DATE: 2003-09-12
PRIOR FILING DATE: 2003-09-12
PRIOR PELICATION NUMBER: 60/430,934
PRIOR PELICATION NUMBER: 60/430,934
PRIOR FILING DATE: 2002-09-13
NUMBER OF SEQ ID NOS: 36
SOFTWARE: PALECATION VOICE: 3.2
SEQ ID NO 23
LENGTH: 40
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Query Match 0.8%; Score 40; DB 1; Length 40; Best Local Similarity 100.0%; Pred. No. 12; Matches 40; Conservative 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                 Length 40;
                                                                                                                                                                                                                                                                                                                                                      Indela
                                                                                                                                                                                                                                                                                                                                                                                                                       DB 1;
12;
                                                                                                                                                                                                                                                                              Query Match

0.8%; Score 40; DB
Best Local Similarity 100.0%; Pred. No. 12;
Matches 40; Conservative 0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Sequence 23, Application US/10661415
Publication No. US20040229828A1
                                           TYPE: DNA ORGANISM: Artificial Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TYPE: DNA ORGANISM: Artificial Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    US-10-661-415-23/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    US-10-463-574A-1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                          ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TITLE OF INVENTION: METHOD OF DETECTING POLYMORPHISMS IN DNA USING MASS SPECTROMETRY FILE OF INVENTION: METHOD OF DETECTING POLYMORPHISMS IN DNA USING MASS SPECTROMETRY FILE REPERRENCE: 532842006600 CURRENT PAPLICATION NUMBER: US/10/450,761 CURRENT FILING DATE: 2003-06-12 PRIOR PAPLICATION NUMBER: PCT/JP01/10892 PRIOR FILING DATE: 2000-13-12 PRIOR FILING DATE: 2000-12-12 PRIOR PLING DATE: 2000-12-12 SPIOR PILING DATE: 2000-12-12 SPIOR PILING DATE: 2000-12-12 NUMBER OF SEQ ID NOS: 7 SEQ ID NOS: 7 SEQ ID NO S: 7 
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                          Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   PRATURE:
OTHER INFORMATION: Description of Artificial Sequence:an artificially
CTHER INFORMATION: synthesized DNA sequence
US-10-450-761-6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ö
                                                                                                                                                                                                                                                                                                                                                                                                                          ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    RESULT 4

US-10-661415-20

SQUENCE 20, Application US/10661415

SQUENCE 20, Application US/10661415

SQUENCE 20, Application US/10661415

SQUENCE 20, Application US/10661415

SQUENCE 20, US20040229828A1

SAPPLICANT: VALLLANT, ANDREW

TILLE OF INVENTION: ANTIVIRAL OLIGONUCLEOTIDES TARGETING RSV

TILLE OF INVENTION: ANTIVIRAL OLIGONUCLEOTIDES TARGETING RSV

CURRENT APPLICATION UNMBER: US/10/661,415

CURRENT FILING DATE: 2003-09-12

PRIOR APPLICATION NUMBER: 60/430,934

PRIOR APPLICATION NUMBER: 60/430,934

PRIOR APPLICATION NUMBER: 60/410,264

PRIOR APPLICATION NUMBER: 60/410,264
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Query Match 0.8%; Score 40.6; DB 1; Length 50; Best Local Similarity 91.5%; Pred. No. 14; Matches 43; Conservative 0; Mismatches 4; Indels
                                                                                                                                                                                                                                                                                                                                                      DB 1; Length 50;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                4; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Query Match 0.8%; Score 40.6; Dest Local Similarity 91.5%; Pred. No. 14; Matches 43; Conservative 0; Mismatches
NUMBER OF SEQ ID NOS: 6
SOFTWARE: FastSEQ for Windows Version 4.0
                                                                                                                                                                                                             // PEATURE:
// OTHER INFORMATION: synthetic construct
US-10-431-627-3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ; Sequence 6, Application US/10450761; Publication No. US20040248098A1; GENERAL INFORMATION:
                                                                                                                                            TYPE: DNA ORGANISM: Artificial Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ORGANISM: Artificial Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            NUMBER OF SEQ ID NOS: 36
SOFTWARE: Patentin Ver. 3.2
SEQ ID NO 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     RESULT 3
US-10-450-761-6/c
                                                                    SEQ ID NO 3
LENGTH: 50
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TYPE: DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ò
```

```
APPLICANT: Atabekov, Yurii
APPLICANT: Borokhov, Yurii
APPLICANT: Studachev, Maxim
APPLICANT: Studachev, Maxim
APPLICANT: Studachev, Maxim
APPLICANT: Studachev, Maxim
APPLICANT: Transov, Peter
APPLICANT: Gleba, Yuri
TILE OF INVENTION: IDENTIFICATION OF EUKARYOTIC INTERNAL RIBOSOME ENTRY SITE (IRES)
TILLE OF INVENTION: ELEMENTS
FILE REFERENCE: 9286.30
CURRENT PRILING DATE: 2004-03-02
PRIOR APPLICATION NUMBER: PCT/EP02/09844
PRIOR PLILING DATE: 2001-09-03
PRIOR PLILING DATE: 2001-09-04
NUMBER OF SEQ ID NOS: 41
SEQ ID NO 3:
LENGTH: 51
                                                                                                                                                                                                                                              US-10-6-61-402-23/C

Sequence 23, Application US/10661402

Sequence 23, Application US/10661402

Publication No. US20050153912A1

GENERAL INFORMATION:

APPLICANT: USILLANT, ANDEW

APPLICANT: USILLANT, ANDEW

TITLE OF INVENTION: ANTIVIRAL OLIGONUCLEOTIDES TARGETING VIRAL FAMILIES

FILE REPERENCE: 029849/0207

CURRENT APPLICATION NUMBER: US/10/661,402

PRIOR APPLICATION NUMBER: US/10/661,402

PRIOR PILING DATE: 2003-09-11

PRIOR PILING DATE: 2003-09-11

PRIOR PILING DATE: 2002-09-13

NUMBER OF SEQ ID NOS: 36

SOFTWARE: PatentIn Ver: 3.2

SEQ ID NO 23

LENGTH: 40
                                                                                              ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ö
                                                                                              Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  FEATURE: OTHER INFORMATION: Description of Artificial Sequence: Synthetic OTHER INFORMATION: oligonucleotide
                                                                                              ..
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ö
                                             0.8%; Score 40; DB 1; Length 40; 00.0%; Pred. No. 12;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  DB 1; Length 40;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Indels
                                                                                                                                    0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Query Match

0.8%; Score 40; DB
Best Local Similarity 100.0%; Pred. No. 12;
Matches 40; Conservative 0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   US-10-489-136-31
; Sequence 31, Application US/10489136
; Publication No. US20050014150A1
; GENERAL INFORMATION:
                                                                       100.0%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ORGANISM: Artificial Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TYPE: DNA . ORGANISM: Nicotiana tabacum
                                                                                           Conservative
                      Query Match
Best Local Similarity
    US-10-661-402-20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       US-10-661-402-23
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TYPE: DNA
                                                                                                                                                                           요
                                                                                                                                       ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              g
                                                                                                                                                                                                                                                                                                                                                                                        GENERAL INFORMATION:

APPLICANT: Okamoto, Tadashi
APPLICANT: Takase, Hiromitation:
APPLICANT: Hashimoto, Hiropuki
TITLE OF INVENTION: Spectrometry
FILE OF INVENTION: Spectrometry
FILE REFERENCE: 03560.00311
CURRENT APPLICATION NUMBER: US/10/463,574A
FILE REFERENCE: 03560.00311
CURRENT FILING DATE: 2003-06-18
PRIOR PILING DATE: 2002-06-28
NUMBER OF SEQ ID NOS: 2
LENGTH: 40
                                                                                                                                                           ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        APPLICANT: VAILLANT, ANDREW
APPLICANT: VAILLANT, ANDREW
TITLE OF INVENTION: ANTIVIRAL OLICONUCLEOTIDES TARGETING VIRAL FAMILIES
FILE REFERENCE: 0.29849/0.207
CURRENT APPLICATION NUMBER: US/10/661,402
CURRENT FILING DATE: 2.003-09-12
PRIOR APPLICATION NUMBER: PCT/IB03/04573
PRIOR APPLICATION NUMBER: 60/430,934
PRIOR PILING DATE: 2.002-19-11
PRIOR APPLICATION NUMBER: 60/410,264
PRIOR FILING DATE: 2.002-09-11
NUMBER: 0.410,264
PRIOR FILING DATE: 2.002-09-13
NUMBER OF SEQ ID NOS: 36
SOFTWARE: PATENTIN VET: 3.2
SEQ ID NO 20
LENGTH: 40
                                                                                                                                                           Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  OTHER INFORMATION: Description of Artificial Sequence: Synthetic OTHER INFORMATION: oligonucleotide
                                                                                                                                                           ..
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ;
0
                                                                                                           Query Match

0.8%; Score 40; DB 1; Length 40;
Best Local Similarity 100.0%; Pred. No. 12;
Matches 40; Conservative 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Length 40;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    0; Indels
                                                                                                                                                                                                ; OTHER INFORMATION: Sequence for Hybridization Test
US-10-463-574A-1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         OTHER INFORMATION: Sequence for Hybridization Test
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Query Match 0.8%; Score 40; DB 1; Best Local Similarity 100.0%; Pred. No. 12; Matches 40; Conservative 0; Mismatches
                                                                                                                                                                                                                                                                                                                                                     Sequence 2, Application US/10463574A Publication No. US20040259088A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ; Sequence 20, Application US/10661402; Publication No. US20050153912A1; GENERAL INFORMATION:
ORGANISM: Artificial Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ORGANISM: Artificial Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ORGANISM: Artificial Sequence
                                                                                                                                                                                                                                                                                                                              US-10-463-574A-2/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             US-10-463-574A-2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            US-10-661-402-20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TYPE: RNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TYPE: DNA
                      FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                FEATURE:
                                                                                                                                                                                                ò
                                                                                                                                                                                                                                         셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ઠ
```

```
LOCATION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     RESULT 12
US-10-601-140A-12/C
; Sequence 12, Application US/10601140A
; Publication No. US20050053942A1
; GENERAL INFORMATION:
, APPLICANT: AACUPENURN; SAKARI
; APPLICANT: AACUPENURN; METHODS AND SYSTEMS FOR DETECTION AND ISOLATION OF A
; TITLE OF INVENTION: MCCLEOTIDE SEQUENCE
; FILE REFERENCE: 57764/71994)
; CURRENT FILING DATE: 2003-06-20
; PRIOR APPLICATION NUMBER: US/10/601,140A
; PRIOR APPLICATION NUMBER: US 60/390,928
; RIOR APPLICATION WHERE: 2002-06-24
; NUMBER OF SEQ ID NOS: 45
; SEQ ID NO 12
; LENGTH: 35
                                                                                                 ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ö
                                                                                                                                                                                                                                                                                                                                                                                                                       ATTLE OF INVENTION: METHODS AND SYSTEMS FOR DETECTION AND ISOLATION OF A TITLE OF INVENTION: MUCLECTIDE SEQUENCE FILE REFERENCE: 57764(7194)
CURRENT APPLICATION NUMBER: US 60/390,928
PRIOR PILING DATE: 2003-06-20
PRIOR FILING DATE: 2003-06-24
NUMBER OF SEQ ID NOS: 45
SOFTWARE: Patentin Ver. 3.2
SEQ ID NO 11
LENGTH: 35
TYPE: DNA
ORGANISM: Artificial Sequence
                                                                                                 Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            OTHER INFORMATION: Description of Artificial Sequence: Synthetic; CTHER INFORMATION: oligonucleotide US-10-601-140A-11
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              OTHER INFORMATION: Description of Artificial Sequence: Synthetic OTHER INFORMATION: oligonucleotide
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                .
0
                                                                                                 ö
                                             Query Match 0.8%; Score 38.4; DB 1; Length 51; Best Local Similarity 97.5%; Pred. No. 21; Matches 39; Conservative 0; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Query Match

0.7%; Score 35; DB 1; Length 35;
Best Local Similarity 100.0%; Pred. No. 27;
Matches 35; Conservative 0; Mismatches 0; Indels
                                                                                                                                          5025 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 5059
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      35 ААААААААААААААААААААААААААААААА
                                                                                                                                                                                                                                                                                                        Sequence 11, Application US/10601140A
Publication No. US20050053942A1
GENERAL INFORMATION: SAFARI
APPLICANT: KAUPPINEN, SAFARI
APPLICANT: JACOBSEN, NANA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             LOCATION: (16)
OTHER INFORMATION: LNA monomer
FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TYPE: DNA
ORGANISM: Artificial Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       NAME/KEY: modified_base
                                                                                                                                                                                                                                                             RESULT 11
US-10-601-140A-11/c
US-10-489-136-31
                                                                                                                                            ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ઠે
```

```
RESULT 13

US-10-646-922-98

Sequence 98, Application US/10848922

Sequence 98, Application US/10848922

Bublication No. US20040235138A1

GENERAL INFORMATION:
THE OF INVENTION: Compositions, Methods and Kits for Determining the Presence of TITLE OF INVENTION: Trichomonas Vaginalis in a Test Sample

TITLE OF INVENTION: Compositions, Methods and Kits for Determining the Presence of TITLE OF INVENTION: Trichomonas Vaginalis in a Test Sample

FILE REFERENCE: GP142-02.UT

CURRENT APPLICATION NUMBER: US/10/848,922

CURRENT FILING DATE: 2004-05-18

PRIOR APPLICATION NUMBER: 60/472,028

PRIOR PRILING DATE: 2003-05-19

SOFTWARE: PatentIn Version 3.2

SEQ ID NO 98

LENGTH: 33
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ; OTHER INFORMATION: Polynucleotide having a 3' poly (dA)30 tail and a 5' poly (dT)3; OTHER INFORMATION: flexible linker for use in a capture probe US-10-848-922-98
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Gape
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Score 31.4; DB 1; Length 33; Pred. No. 51;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Length 35;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     5025 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 5059
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   DB 1;
27;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   35 ААААААААААААААААААААААААААААААА
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Query Match 0.7%; Score 35; DB Best Local Similarity 100.0%; Pred. No. 27; Matches 35; Conservative 0; Mismatches
                                                                                         NAME/KEY: modified_base
LOCATION: (20)
OTHER INFORMATION: LNA monomer
                                                                                                                                                                                                                                                                                                                                                                                 NAME/KRY: modified_base
LOCATION: (26)
OTHER INFORMATION: LNA monomer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            NAME/KEY: modified_base
LOCATION: (32)
OTHER INFORMATION: LNA monomer
                                              OTHER INFORMATION: LNA monomer
                                                                                                                                                                                                                  LOCATION: (22)
OTHER INFORMATION: LNA monomer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CTHER INFORMATION: LNA monomer US-10-601-140A-12
                                                                                                                                                                                                                                                                                                                                        OTHER INFORMATION: LNA monomer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 LOCATION: (30)
OTHER INFORMATION: LNA monomer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       0.6%;
                                                                                                                                                                    FEATURE:
NAME/KEY: modified_base
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      NAME/KEY: modified_base
LOCATION: (28)
OTHER INFORMATION: LNA n
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     FEATURE:
NAME/KEY: modified_base
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             NAME/KEY: modified_base
LOCATION: (34)
NAME/KEY: modified base
                                                                                                                                                                                                                                                                                          NAME/KEY: modified_base
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TYPE: DNA ORGANISM: Artificial
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Query Match
Best Local Similarity
```

```
ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Length 30;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Indels
                                                                                                                                                                                                                                              Chaoqiang, Lai
Wodicka, Lisa
Cronin, Maureen T.
Lee, Danny
Tran, Huu M.
Matsuzaki, Hajime
McGall, Glenn H.
TITLE OF INVENTION: NUCLEIC ACID ANALYSIS TECHNIQUES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.30
                                                                                                                                                                                                                                                                                                                                                                                                                                          CORRESPONDENCE ADDRESS:
ADDRESSEE: Joe Liebeschuetz
STREET: Two Embarcadero Center, Eighth Floor
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   REFERENCE/DOCKET NUMBER: 018547-019410US
TELECOMMUNICATION INFORMATION:
TELEPHONE: (415) 576-0200
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    DB 1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CURRENT APPLICATION DATA.

APPLICATION NUMBER: US/11/021,367
FILING DATE. 23-Dec-2004

PRIOR APPLICATION DATA.

APPLICATION NUMBER: US/08/882,649
FILING DATE. 25-JUN-1997

APPLICATION NUMBER: US 60/010,471
FILING DATE: 23-JAN-1996

APPLICATION NUMBER: US 60/035,170
FILING DATE: 20-JAN-1997

FILING DATE: 22-JAN-1997

FILING DATE: 22-JAN-1997
8 TTTAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 40
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       5025 AAAAAAAAAAAAAAAAAAAAAAAAAAAAA 5054
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Query Match 0.6%; Score 30; DB Best Local Similarity 100.0%; Pred. No. 60; Matches 30; Conservative 0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             (ix) Features:
SEQUENCE DESCRIPTION: SEQ ID NO: 10:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             NAME: Liebeschuetz, Joe
REGISTRATION NUMBER: 37,505
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ZIP: 94111-3834
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
                                                                                                          Sequence 10, Application US/11021367
Publication No. US20050158772A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TELEPHONE: (415) 576-02
TELEFAX: (415) 576-0300
INFORMATION FOR SEQ ID NO: 10:
                                                                                                                                                                            APPLICANT: Lockhart, David J.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TOPOLOGY: linear
MOLECULE TYPE: DNA (genomic)
                                                                                                                                                                                                                      Gunderson, Kevin
Chaoqiang, Lai
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    SEQUENCE CHARACTERISTICS:
LENGTH: 30 base pairs
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ATTORNEY/AGENT INFORMATION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TYPE: nucleic acid
STRANDEDNESS: single
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   San Francisco
                                                                                                                                                                                                                                                                                                                                                                                                                          NUMBER OF SEQUENCES: 32
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             HYPOTHETICAL: YES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                COUNTRY: USA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CITY: San
STATE: CA
                                                                                                                                                      GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            US-11-021-367-10
                                                                                           US-11-021-367-10
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             RESULT 17
                                                                         RESULT 16
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        셤
       셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            US-10-450-761-4

US-10-450-761-4

Sequence 4, Application US/10450761

Sequence 4, Application US/2040248098A1

Sequence 4, Application O. US20040248098A1

GENERAL INFORMATION:
TILE OF INVENTION: METHOD OF DETECTING POLYMORPHISMS IN DNA USING MASS SPECTROMETRY
TILE REFERENCE: 532842000600

CURRENT REPLICATION NUMBER: US/10/450,761

CURRENT REPLICATION NUMBER: PCT/JP01/10892

PRIOR FILING DATE: 2003-06-12

PRIOR FILING DATE: 2000-12-12

NUMBER OF SEQ ID NOS: 7

SOFTWARE: PLANCE DATE: 2000-12-12

NUMBER OF SEQ ID NOS: 7

SEQ DE NO PARTICATION NUMBER: 2000-12-12

NUMBER: SEQ DE NOS: 7

LENGTH: 40
                                                                                                                                                                                                                                                                                                    APPLICANT: Smit, Frank
APPLICANT: Hessels, Daphne
APPLICANT: Verhaegh, Gerald
TITLE OF INVENTION: Specific Method of Prostate Cancer Detection Based on PCA3 Gene,
TITLE OF INVENTION: and Kits Therefor
TITLE OF INVENTION: and Kits Therefor
TITLE OF INVENTION: 2019/0000/JAG/CMB
CURRENT APPLICATION NUMBER: US/10/880, 425A
CURRENT FILING DATE: 2003-06-30
NUMBER OF SEQ ID NOS: 46
SOFTWARE: Patentin version 3.2
SOFTWARE: Patentin version 3.2
LENGTH: 33
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ö
         ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           OTHER INFORMATION: Description of Artificial Sequence:an artificially CTHER INFORMATION: synthesized DNA sequence
           Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ö
           ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Query Match
0.6%; Score 31.4; DB 1; Length 40;
Best Local Similarity 97.0%; Pred. No. 63;
Matches 32; Conservative 0; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Length 33;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1; Indels
           Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            DB 1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             5022 TGTAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 5054
                                                        5022 TGTAAAAAAAAAAAAAAAAAAAAAAAAAAAA 5054
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Query Match 0.6%; Score 31.4; E Best Local Similarity 97.0%; Pred. No. 51; Matches 32; Conservative 0; Mismatches
              Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        OTHER INFORMATION: Synthetic Construct
                                                                                                                                                                                          US-10-880-425A-41
Sequence 41, Application US/10880425A
Publication No. US20050164223A1
GENERAL INFORMATION:
APPLICANT: Schalken, Jack A.
                ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ORGANISM: Artificial Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TYPE: DNA
ORGANISM: Artificial Sequence
                32; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     US-10-880-425A-41
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TYPE: DNA
                  Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ઠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              g
                                                                  ઠે
                                                                                                     셤
```

```
APPLICANT: Kaie, Tay Sun
APPLICANT: Kaie, Tay Sun
APPLICANT: Kaie, Tay Sun
TITLE OF INVENTION: Methods and Probes for Diagnosing a Gynaecological Condition
FILE PETRINCE: POF3AUSA
CURRENT APPLICATION NUMBER: US/10/933,118
CURRENT FILING DATE: 2004-09-02
PRIOR PILING DATE: 2004-09-03
NUMBER OF SEQ ID NOS: 146
SOFTWARE: PatentIn version 3.3
SEQ ID NO 136
LENGTH: 31
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Gape
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Sequence 911, Application US/10831778

Publication No. US20040235774A1

GENERAL INFORMATION:

APPLICANT: Bratzler, Robert L.

APPLICANT: Bretzler, Robert L.

APPLICANT: Perersen, Deanna M.

APPLICANT: Fouron, Yves

TITLE OF INVENTION: Immunostimulatory Nucleic Acids for the TITLE OF INVENTION: Immunostimulatory Nucleic Acids for the TITLE OF INVENTION: Immunostimulatory Nucleic Acids for the TITLE OF INVENTION: UNMERR: US/10/831,778

CURRENT APPLICATION NUMBER: US/04.04-23

PRIOR FILING DATE: 2000-02-03

PRIOR FILING DATE: 2000-02-03

NUMBER OF SEQ ID NOS: 1093

SOFTWARE: FastSEQ for Windows Version 3.0

LENGTH: 27
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Query Match 0.5%; Score 27.4; DB 1; Length 31; Best Local Similarity 96.6%; Pred. No. 1e+02; Matches 28; Conservative 0; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           DB 1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     5038 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAACT 5066
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Query Match 0.5%; Score 27; DB Best Local Similarity 100.0%; Pred. No. 95; Matches 27; Conservative 0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               5025 AAAAAAAAAAAAAAAAAAAAAAAA 5051
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      30 AAAAAAAAAAAAAAAAAAAAAAAAAAGCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ; OTHER INFORMATION: synthetic pcr primer US-10-933-118-136
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  27 AAAAAAAAAAAAAAAAAAAAAAA 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ) OTHER INFORMATION: Synthetic Sequence US-10-831-778-911
                                                                                           Sequence 136, Application US/10933118
Publication No. US20050142580A1
GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   US-10-085-906-294; Sequence 294, Application US/10085906; Publication No. US20030054371A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TYPE: DNA ORGANISM: Artificial Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TYPE: DNA ORGANISM: Artificial
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  GENERAL INFORMATION:
                                        RESULT 19
US-10-933-118-136/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               US-10-831-778-911/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ô
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Sequence 225, Application US/10085906

Sequence 225, Application US/10085906

Publication No. US20030054371A1

GENERAL INFORMATION:

APPLICANT: Wu, Paul

APPLICANT: Wu, Paul

TITLE OF INVENTION: POLYMORPHIC ELEMENTS IN THE

TITLE OF INVENTION: COSTIMULATORY RECEPTOR LOCUS AND USES THEREOF

TITLE OF INVENTION: COSTIMULATORY RECEPTOR LOCUS AND USES THEREOF

FILE REFERENCE: GNN-5343CP2

CURRENT APPLICATION NUMBER: US/10/085,906

PRIOR PELING DATE: 1999-03-25

PRIOR APPLICATION NUMBER: US 09/534,061

PRIOR PELING DATE: 2000-03-24

PRIOR APPLICATION NUMBER: PCT/US00/07938

PRIOR APPLICATION NUMBER: PCT/US00/07938

PRIOR APPLICATION NUMBER: PCT/US00/07938

SOFTWARE: FastEEQ for Windows Version 4.0

LENGTH. 23
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ö
Sequence 8, Application US/10764799;
Sequence 8, Application US/10764799;
Publication No. US2004025361241
SEBERAL INFORMATION:
APPLICANT: Scotak, Jack W.
APPLICANT: Roberts, Richard W.
TITLE OF INVENTION: SELECTION OF PROTEINS USING RNA-PROTEIN
TITLE OF INVENTION: EUSIONS
FILE REFERENCE: 00786/350005
CURRENT APPLICATION NUMBER: US/10/764,799
CURRENT FILING DATE: 1999-02-09
PRIOR APPLICATION NUMBER: 60/035,963
PRIOR FILING DATE: 1997-01-21
PRIOR FILING DATE: 1999-01-14
PRIOR FILING DATE: 1999-01-14
SOFTWARE: FREESC for Windows Version 4.0
SEQ ID NO 8
LENGTH: 29
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Query Match 0.6%; Score 28; DB 1; Length 37; Best Local Similarity 86.1%; Pred. No. 1.1e+02; Matches 31; Conservative 0; Mismatches 5; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Length 29;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              IndelB
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              5025 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 5060
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               37 AAAAAATAAAATAAAATAAAATAAAATAAAA 2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           DB 1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Query Match 0.6%; Score 28; DB Best Local Similarity 100.0%; Pred. No. 85; Matches 28; Conservative 0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 5038 AAAAAAAAAAAAAAAAAAAAAAAAAAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 28
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             OTHER INFORMATION: Translation template
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TYPE: DNA
ORGANISM: Artificial Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TYPE: DNA
ORGANISM: Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           RESULT 18
US-10-085-906-225/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       US-10-085-906-225
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        US-10-764-799-8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       g
```

```
Sequence 7, Application US/10160786

Publication No. US2030225013A1

Publication No. US2030225013A1

Publication No. US2030225013A1

APPLICANT: Susan M. Freier

APPLICANT: Kenneth W. Dobie

TITLE OF INVENTION: P150 EXPRESSION

TITLE OF INVENTION: P150 EXPRESSION

TITLE OF INVENTION: UNMBER: US/10/160,786

CURRENT PILING DATE: 2002-05-31

NUMBER OF SEQ ID NOS: 147

SEQ ID NO 7

LENGTH: 26
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ö
                                                                                                                                                                                                                                                                                                                                                               ..
0
                                                                                                                                                                                                                                                                                                                                                                 Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ö
                                                                                                                                                                                                                                                                                                                                                                 .;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  US-10-942-251-8/C
US-10-942-251-8/C
Sequence 8, Application US/10942251
; Sequence 8, Application US/10942251
; Publication No. US20050069524A1
; GENERAL INFORMATION:
    TITLE OF INVENTION: NUCLEIC ACIDS INTO CIRCULAR VECTORS; FILE REFERENCE: 11639/1
    CURRENT APPLICATION NUMBER: US/10/942,251
    CURRENT FILING DATE: 2004-09-16
    PRIOR FILING DATE: 1998-12-17
    NUMBER OF SEQ ID NOS: 50
    SOFTWARE: PSELSEQ for Windows Version 4.0
    SEQ ID NO 8
    LENGTH: 28
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Length 28;
                                                                                                                                                                                                                                                                                                                   Length 32;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Indels
                                                                                                                                                                                                                                                                                                                                                                 Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Query Match
0.5%; Score 26.4; DB 1;
Best Local Similarity 96.4%; Pred. No. 1.1e+02;
Matches 27; Conservative 0; Mismatches 1;
                                                                                                                                                                                                                                                                                                                 Query Match

0.5%; Score 26.8; DB 1;
Best Local Similarity 93.3%; Pred. No. 1.2e+02;
Matches 28; Conservative 0; Mismatches 2;
                                                                                                                                                                                                                                                                                                                                                                                                             CURRENT FILING DATE: 2004-09-16
PRIOR APPLICATION NUMBER: US/09/213,834
PRIOR FILING DATE: 1998-12-17
NUMBER OF SEQ ID NOS: 50
SOFTWARE: FastSEQ for Windows Version 4.0
SEQ ID NO 29
LENGTH: 32
CURRENT APPLICATION NUMBER: US/10/942,251
                                                                                                                                                                                                                             FEATURE:
COTHER INFORMATION: Cloning Vector
US-10-942-251-29
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             OTHER INFORMATION: Cloning Vector
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TYPE: DNA
ORGANISM: Artificial Sequence
FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ORGANISM: Artificial Sequence
                                                                                                                                                                                         TYPE: DNA ORGANISM: Artificial Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                US-10-160-786-7
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   US-10-942-251-8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TYPE: DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           RESULT 25
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            8
                                                                                                                                                                                                                                                                                                                                                                                                                         ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                               g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ; OTHER INFORMATION: DNA bases used to represent integers in DNA based number system US-10-849-491-1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Gaps
                                                       APPLICANT: Gray, Gary S.
TITLE OF INVENTION: POLYMORPHIC ELEMENTS IN THE TITLE OF INVENTION: POLYMORPHIC ELEMENTS IN THE TITLE OF INVENTION: COSTINULATORY RECEPTOR LOCUS AND USES THEREOF FILE OF INVENTION: COSTINULATORY RECEPTOR LOCUS AND USES THEREOF CURRENT APPLICATION WUMBER: US/10/085,906
CURRENT APPLICATION NUMBER: US/0126,215
PRIOR APPLICATION NUMBER: US 60/126,215
PRIOR PILING DATE: 1999-03-24
PRIOR PILING DATE: 2000-03-24
PRIOR PILING DATE: 2000-03-24
NUMBER OF SEQ ID NOS: 545
SOFTWARE: FastSEQ for Windows Version 4.0
SEQ ID NO 294
LENGTH: 36
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Ouery Match 0.5%; Score 26.8; DB 1; Length 31; Best Local Similarity 93.3%; Pred. No. 1.1e+02; Matches 28; Conservative 0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Sequence 1, Application US/10849491
Publication No. US20050055167A1
GENERAL INFORMATION:
APPLICANT: BHARADWAJ, LALIT M.
APPLICANT: SHUKLA, AWHESH KUWAR M.
APPLICANT: KUMAR, RAKESH P.
APPLICANT: BHONDEKAR, AMOL P.
APPLICANT: BHONDEKAR, AMOL P.
APPLICANT: BADPAL, RAM BRAKASH
TITLE OF INVENTION: DNA BASED NUMBER SYSTEM AND ARTITHMETIC
FILE REPERRENCE: U 0125019
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Query Match 0.5%; Score 27; DB 1; Length 36; Best Local Similarity 85.7%; Pred. No. 1.3e+02; Matches 30; Conservative 0; Mismatches 5; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Sequence 29, Application US/10942251
Publication No. US20050069524A1
GENERAL INFORMATION:
APPLICANT: Romantchikov, Yuri
TITLE OF INVENTION: NUCLEIC ACIDS INTO CIRCULAR VECTORS;
FILE REFERENCE: 11639/1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             5025 дадададададададададададададададада 5059
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 2 AAAAACAAAAAAACAAAACAAAACAAAAAA 36
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        5025 AAAAAAAAAAAAAAAAAAAAAAAAAAAA 5054
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1 AAAAAAAAAAAAAAAAAAAAAAA 30
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CURRENT APPLICATION NUMBER: US/10/849,491
CURRENT FILING DATE: 2004-05-19
NUMBER OF SEQ ID NOS: 5
SOFTWARE: PatentIn version 3.3
SEQ ID NO 1
LENGTH: 31
                APPLICANT: Ying, Vincent APPLICANT: Wu, Paul
                                                                                                                                                                                                                                                                                                                                                                                                                                     ; TYPE: DNA
; ORGANISM: Homo sapiens
US-10-085-906-294
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TYPE: DNA
ORGANISM: Artificial
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    US-10-942-251-29/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           요
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                엄
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ð
```

```
ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Gapa
                                                                                                                                                                                                                                                                                                          ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Sequence 7, Application US/10969164
; Bedulication No. US2005006532A1
; GENERAL INFORMATION:
    APPLICANT: Sheppard, Paul O.
; APPLICANT: Adder, David A.
; TITLE OF INVENTION: SECRETED SALIVARY ZSIG63 POLYPEPTIDE:
FILE REFERENCE: 97-71
; CURRENT APPLICATION NUMBER: US/10/969,164
; CURRENT FILING DATE: 2004-10-20
; PRIOR APPLICATION NUMBER: US/09/527,345
; PRIOR PLILING DATE: 1999-03-17
; PRIOR PLILING DATE: 1999-03-17
; NUMBER OF SEQ ID NOS: 9
; SOFTWARE: FRELSEQ for Windows Version 3.0
; SEQ ID NO 7
LENGTH: 26
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Sequence 6, Application US/10969164
; Bublication No. US20050065322A1
; GENERAL INFORMATION:
; APPLICANT: Sheppard, Paul O.
; APPLICANT: Sheppard, Paul O.
; APPLICANT: Adder, David A.
; TITLE OF INVENTION: SECRETED SALIVARY ZSIG63 POLYPEPTIDE
; FILE REPERENCE: 97-71
; CURRENT APPLICATION NUMBER: US/10/969,164
; CURRENT FILING DATE: 2004-10-20
; PRIOR APPLICATION NUMBER: US/09/527,345
; PRIOR APPLICATION NUMBER: US 60/124,820
; PRIOR PILING DATE: 1999-03-17
; NUMBER OF SEQ ID NOS: 9
; SOFTWARE: FREESEQ for Windows Version 3.0
; SEQ ID NO 6
; LENGTH: 26
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Query Match 0.5%; Score 26; DB 1; Length 26; Best Local Similarity 100.0%; Pred. No. 1.1e+02; Matches 26; Conservative 0; Mismatches 0; Indels
                                                                                                                                                                                                                                      Length 26;
                                                                           FEATURE:
; OTHER INFORMATION: Oligonucleotide primer 2C7764a
US-10-787-442-38
                                                                                                                                                                                                                           Query Match 0.5%; Score 26; DB 1; L
Best Local Similarity 100.0%; Pred. No. 1.1e+02;
Matches 26; Conservative 0; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      , OTHER INFORMATION: Oligonucleotide primer ZC7764a
US-10-969-164-7
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   FEATURE:

7 OTHER INFORMATION: Oligonucleotide primer ZC7231

US-10-969-164-6
                                                                                                                                                                                                                                                                                                                                                                              5024 TAAAAAAAAAAAAAAAAAAAA 5049
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                5024 TAAAAAAAAAAAAAAAAAAAA 5049
                                                                                                                                                                                                                                                                                                                                                                                                                                                      26 TAAAAAAAAAAAAAAAAAAAAAA 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    26 TAAAAAAAAAAAAAAAAAAAA 1
           TYPE: DNA ORGANISM: Artificial Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TYPE: DNA ORGANISM: Artificial Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TYPE: DNA
ORGANISM: Artificial Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              US-10-969-164-7/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       US-10-969-164-6/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    셤
                                                                                                                                                                                                                                                                                                                                                                                  ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Sequence 7. Application US/10667022

Publication No. US20040063657A1

GENERAL INFORMATION:

APPLICANT: Susan M. Freier

APPLICANT: Kenneth W. Dobie

TITLE OF INVENTION: ANTISENSE MODULATION OF PHOSPHOINOSITIDE-3-KINASE, REGULATORY SUBTITLE OF INVENTION: PLSO EXPRESSION
FILE REFERENCE: RTS-0376

CURRENT APPLICATION NUMBER: US/10/667,022

CURRENT FILING DATE: 2003-09-18

NUMBER OF SEQ ID NOS: 147

SEQ ID NO 7

LENGTH: 26
                                                                                                                                                                                            ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ö
                                                                                                                                                                                            Gaps
                                                                                                                                                                                            ..
0
                                                                                                                     Score 26; DB 1; Length 26;
Pred. No. 1.1e+02;
0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Query Match 0.5%; Score 26; DB 1; Length 26; Best Local Similarity 100.0%; Pred. No. 1.1e+02; Matches 26; Conservative 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           APPLICANT: JOHNSTON, JOHNS
                                                                                                                 Query Match 0.5%; Score 26; DB Best Local Similarity 100.0%; Pred. No. 1.1 Matches 26; Conservative 0; Mismatches
                                                                                                                                                                                                                                                                2447 CTGAGGAATTTGTCATTGTGAAAGCT 2472
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          2447 CTGAGGAATTTGTCATTGTGAAAGCT 2472
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         NUMBER OF SEQ ID NOS: 115
SOFTWARE: FastSEQ for Windows Version 3.0
SEQ ID NO 38
LENGTH: 26
                                                                                                                                                                                                                                                                                                                                     1 crcaccaartrercartercaaaccr 26
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           creaceaarrrercarrercaaecr 26
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Sequence 38, Application US/10787442
Publication No. US20040260065A1
GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              APPLICANT: Novak, Julia E.
APPLICANT: Presnell, Scott R.
APPLICANT: Sprecher, Clindy A.
APPLICANT: Foster, Donald C.
APPLICANT: Holly, Richard D.
APPLICANT: Gross, Jane A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TYPE: DNA
ORGANISM: Artificial Sequence
; OTHER INFORMATION: PCR Probe US-10-160-786-7
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         OTHER INFORMATION: PCR Probe
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               US-10-667-022-7
                                                                                                                                                                                                                                                                                                                             셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ઠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       g
```

```
RESULT 33
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ઠે
                                                                                                                                                                                                                                                       g
                                                                                                                                                                                                                  ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ö
                                           ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Sequence 51, Application US/10838122
; Sequence 51, Application US/10838122
; Publication No. US2005064554A1
; GENERAL INFORMATION:
; APPLICANT: FISHER, LAURENT BERNARD
; APPLICANT: BARZU-LE-ROUX, SIMONA
; TITLE OF INVENTION CANINE GHRH GENE, POLYPEPTIDES AND METHODS OF USE
; FILE REFERENCE: MER 03-007
; CURRENT APPLICATION NUMBER: US/10/838,122
; CURRENT PILING DATE: 2004-05-03
; PRIOR APPLICATION NUMBER: 60/467,405
; PRIOR PLING DATE: 2003-05-01
; SOFTWARE: Patentin Ver. 3.2
; SEQ ID NO 5:
; LENGTH: 27
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Gaps
                                           Gaps
                                                                                                                                                                                                           APPLICANT: WITTMAN, VAUGHAN
APPLICANT: WEIDANZ, JON A.
APPLICANT: BURKHARDT, MARTIN
APPLICANT: BURKHARDT, MARTIN
APPLICANT: CARD, KIMBERLYN F.
APPLICANT: APPLICANT: ACEVEDO, JORGE
APPLICANT: ACEVEDO, JORGE
APPLICANT: WONG, HING C.
ITILE OF INVENTION: WOULDATION OF T CELL RECEPTOR INTERACTIONS
FILE REFERENCE: 4944 (717.88)
CURRENT FILING DATE: 2001-05-16
PRIOR APPLICATION NUMBER: 60/206,920
PRIOR PLING DATE: 2000-05-25
NUMBER OF SEQ ID NOS: 49
SOFTWARE: PREGNIIN VET: 2.1
SEQ ID NO 37
LENGTH: 27
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           OTHER INFORMATION: Description of Artificial Sequence: Synthetic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 .
                                           ;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   OTHER INFORMATION: Description of Artificial Sequence: Primer NAME/KEY: modified_base
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Query Match 0.5%; Score 25.2; DB 1; Length 27; Best Local Similarity 96.2%; Pred. No. 1.30+02; Matches 25; Conservative 1; Mismatches 0; Indels
    Length 26;
Query Match 0.5%; Score 25.2; DB 1; Best Local Similarity 96.2%; Pred. No. 1.38+02; Matches 25; Conservative 1; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          5024 TAAAAAAAAAAAAAAAAAAAAAAAA 5049
                                                                                         5024 TAAAAAAAAAAAAAAAAAAAAAAA 5049
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        26 ВАААААААААААААААААААААА 1
                                                                                                                                                                                                       RESULT 30
US-09-859-012-37/c
US-09-869-012-37/c
; Sequence 37, Application US/09859012
; Publication No. US20040253632A1
; GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CTHER INFORMATION: A, C, G, or T
US-09-859-012-37
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ORGANISM: Artificial Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TYPE: DNA ORGANISM: Artificial Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           RESULT 31
US-10-838-122-51/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TYPE: DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ద
```

```
Sequence 104782, Application US/10956157

Sequence 104782, Application No. US20050118625A1

Publication No. US20050118625A1

GENERAL INFORMATION

APPLICANT: Wyeth

APPLICANT: Wounts, William

TITLE OF INVENTION: HUMAN OSTEOMATHRITIS AND HUMAN PROTEASES

TITLE OF INVENTION NUMBER: US/10/956,157

CURRENT FILING DATE: 2004-10-04

NUMBER OF SEQ ID NOS: 319805

SOFTWARE: PATENTIN VERSION 3.2

SEQ ID NO 104782

LENGTH: 25
                                                                                                                                                                                                                                   ö
                                                                                                                                                                                                                                                                                                                                                                                                            US-11-015-461-51/c

US-11-015-461-51/c

Sequence 51, Application US/11015461

Publication No. US20050164946A1

GENERAL INFORMATION:
APPLICANT: FISHER, LAURENT BERNARD
APPLICANT: CACHET, NATHALIE MICHELE
APPLICANT: BARZU-LE-ROUX, SIMONA
TITLE OF INVENTION: CANINE GHRH GENE, POLYPEPTIDES AND METHODS OF USE
FILE REFERENCE: MER 03-007

CURRENT FILING DATE: 2004-12-7

PRIOR APPLICATION NUMBER: 60/467,405

PRIOR FILING DATE: 2003-05-01

NUMBER OF SEQ ID NOS: 51

SOFTWARE: PATENTIN VET: 3.2

SEQ ID NO 51

LENGTH: 27

LENGTH: 27

LENGTH: 27
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Gaps
                                                                                                                                                                                                                                   Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         OTHER INFORMATION: Description of Artificial Sequence: Synthetic OTHER INFORMATION: oligonucleotide
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ;
0
                                                                                                                                                                                                                                   ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Query Match 0.5%; Score 25.2; DB 1; Length 27; Best Local Similarity 96.2%; Pred. No. 1.3e+02; Matches 25; Conservative 1; Mismatches 0; Indels
                                                                                                                                                                           Query Match

0.5%; Score 25.2; DB 1; Length 27;
Best Local Similarity 96.2%; Pred. No. 1.3e+02;
Matches 25; Conservative 1; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      5024 TAAAAAAAAAAAAAAAAAAA 5049
                                                                                                                                                                                                                                                                                              5024 TAAAAAAAAAAAAAAAAAAAAAA 5049
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         OTHER INFORMATION: oligonucleotide
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       NAME/KEY: modified_base

) LOCATION: (27)

; OTHER INFORMATION: a, t, c or g

US-11-015-461-51
                                                                                                          ρ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TYPE: DNA ORGANISM: Artificial Sequence
                                                                                                             ö
                              FEATURE:
NAME/KEY: modified_base
LOCATION: (27)
OTHER INFORMATION: a, t, c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ; TYPE: DNA
; ORGANISM: Probe Sequence
US-10-956-157-104782
```

```
TITLE OF INVENTION: MOUNTES, William TITLE OF INVENTION: NUCLEIC ACID ARRAYS FOR DETECTING GENE EXPRESSION ASSOCIATED WITH TITLE OF INVENTION: HUMAN OSTEOARTHRITIS AND HUMAN PROTEASES FILE REPERENCE: 031896-043000 (AM 101081) CURRENT APPLICATION NUMBER: US/10/956,157 CURRENT FILING DATE: 2004-10-04 SOCTUMENT FILING DATE: 2004-10-04 SOCTUMENT FILING DATE: 2004-10-04 SOCTUMENT FILING DATE: DATE SOCTUMENT FILING DATE: TOWNER OF SEQ ID NOS: 319805 SOCTUMENT PARENT FILING DATE: TOWNER OF SEQ ID NOS: 319805 SOCTUMENT FILING DATE: TOWNER OF SEQ ID NOS: 319805 SOCTUMENT FILING DATE: TOWNER OF SEQ ID NOS: 319805 SOCTUMENT FILING DATE: TOWNER OF SEQ ID NOS: 319805 SOCTUMENT FILING DATE: TOWNER OF SEQ ID NOS: 319805 SOCTUMENT FILING DATE: TOWNER OF SEQ ID NOS: 319805 SOCTUMENT FILING DATE: TOWNER OF SEQ ID NOS: 319805 SOCTUMENT FILING DATE: TOWNER OF SEQ ID NOS: 319805 SOCTUMENT FILING DATE: TOWNER OF SEQ ID NOS: 319805 SOCTUMENT FILING DATE: TOWNER OF SEQ ID NOS: 319805 SOCTUMENT FILING DATE: TOWNER OF SEQ ID NOS: 319805 SOCTUMENT FILING DATE: TOWNER OF SEQ ID NOS: 319805 SOCTUMENT FILING DATE: TOWNER OF SEQ ID NOS: 319805 SOCTUMENT FILING DATE: TOWNER SEQ ID NOS: 319805 SOCTUMENT FILING FI
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               RESULT 37
US-10-956-157-104786

Sequence 104786, Application US/10956157

Sequence 104786, Application No. US20050118625A1

GENERAL INFORMATION:

APPLICANT: Wyeth

APPLICANT: Wyeth

TITLE OF INVENTION: UUCLEIC ACID ARRAYS FOR DETECTING GENE EXPRESSION ASSOCIATED WITH

TITLE OF INVENTION: HUMAN OSTEOARTHRITIS AND HUMAN PROTEASES

TITLE OF INVENTION: HUMAN OSTEOARTHRITIS AND HUMAN PROTEASES

CURRENT APPLICATION NUMBER: US/10/956,157

CURRENT APPLICATION NUMBER: US/10/956,157

CURRENT FILING DATE: 2004-10-04

NUMBER OF SEQ ID NOS: 319805

SOFTWARE: PALENTIN VERSION 3.2

SEQ ID NO 104786

LENGTH: 25
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Sequence 104787, Application US/10956157

Sequence 104787, Application US/10956157

Publication No. US20050118625A1

GENERAL INFORMATION:
GENERAL INFORMATION:
APPLICANT: Myeth
APPLICANT: Mounts, William
TITLE OF INVENTION: HUMAN OSTEOARTHRITIS AND HUMAN PROTEASES
TITLE OF INVENTION: 01806-04300 (AM 101081)
CURRENT APPLICATION NUMBER: US/10/956,157
CURRENT FILING DATE: 2004-10-04
NUMBER OF SEQ ID NOS: 319805
SOFTWARRE PATENTIN version 3.2
SEQ ID NO 104787
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Сарв
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           DB 1; Le
1.3e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 0.5%; Score 25; DB 1; Lo
100.0%; Pred. No. 1.3e+02;
trive 0; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        0.5%; Score 25; DB 100.0%; Pred. No. 1.3 tive 0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              4481 AGAATAAGCAGAAAGTAGGACCAAG 4505
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       4482 GAATAAGCAGAAAGTAGGACCAAGT 4506
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1 AGAATAAGCAGAAAGTAGGACCAAG 25
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1 GAATAAGCAGAAGTAGGACCAAGT 25
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Query Match 0.5
Best Local Similarity 100.
Matches 25; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         25; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ; ORGANISM: Probe Sequence US-10-956-157-104785
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TYPE: DNA
ORGANISM: Probe Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ORGANISM: Probe Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      US-10-956-157-104786
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  RESULT 38
US-10-956-157-104787
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            US-10-956-157-104787
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TITLE OF INVENTION: MUCLEIC ACID ARRAYS FOR DETECTING GENE EXPRESSION ASSOCIATED WITH TITLE OF INVENTION: HUMAN OSTEOACHTITLS AND HUMAN PROTEASES
FILE REFERENCE: 031896-043000 (AM 101081)
CURRENT APPLICATION NUMBER: US/10/956,157
CURRENT FILING DATE: 2004-10-04
NUMBER OF SEQ ID NOS: 319805
SOFTWARE: PETENTIN VERSION 3.2
LENGTH: 25
TYPE: ...
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Sequence 104784, Application US/10956157
Publication No. US20050118625A1
GENERAL INFORMATION:
APPLICANT: Wyeth
APPLICANT: Wyeth
TITLE OF INVENTION: HUMAN OSTEOARTHRITIS AND HUMAN PROTEASES
FILE REFERENCE: 031896-043000 (Am 101081)
CURRENT APPLICATION NUMBER: US/10/956,157
CURRENT PILING DATE: 2004-10-04
NUMBER OF SEQ ID NOS: 319805
SOFTWARE: Patentin version 3.2
                                                                                                                                                                                                                                             ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ö
                                                                                                                                                                                                                                             Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Gaps
                                                                                                                                                                                                                                             ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ö
                                                                                                                                                                        Score 25; DB 1; Length 25;
Pred. No. 1.3e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 0.5%; Score 25; DB 1; Length 25;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          0.5%; Score 25; DB 1; Length 25;
100.0%; Pred. No. 1.3e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Pred. No. 1.3e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Query Match 0.5%; Score 25; DB Best Local Similarity 100.0%; Pred. No. 1.3 Matches 25; Conservative 0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        100.0%; Preu. ...
                                                                                                                                                                        Query Match 0.5%; Score 25; DB Best Local Similarity 100.0%; Pred. No. 1.3 Matches 25; Conservative 0; Mismatches
                                                                                                                                                                                                                                                                                                        4446 AATAATTGAAGGCACTGAAGTTGTC 4470
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    4447 ATAATTGAAGGCACTGAAGTTGTCC 4471
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             4448 TAATTGAAGCACTGAAGTTGTCCA 4472
                                                                                                                                                                                                                                                                                                                                                 1 AATAATTGAAGGCACTGAAGTTGTC 25
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1 ATAATTGAAGGCACTGAAGTTGTCC 25
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TAATTGAAGGCACTGAAGTTGTCCA 25
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ; Sequence 104785, Application US/10956157; Publication No. US20050118625A1; GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Query Match
Best Local Similarity 100.
Matches 25; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ) ORGANISM: Probe Sequence US-10-956-157-104783
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ; ORGANISM: Probe Sequence US-10-956-157-104784
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        RESULT 36
US-10-956-157-104785
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          RESULT 34
US-10-956-157-104783
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  RESULT 35
US-10-956-157-104784
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  SEQ ID NO 104784
LENGTH: 25
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           윱
                                                                                                                                                                                                                                                                                                           ò
                                                                                                                                                                                                                                                                                                                                                               g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ઠ
```

```
TITLE OF INVENTION: William
TITLE OF INVENTION: WILLIAM NUCLEIC ACID ARRAYS FOR DETECTING GENE EXPRESSION ASSOCIATED WITH
TITLE OF INVENTION: HUMAN OSTEOARTHRITIS AND HUMAN PROTEASES
FILE REPERENCE: 031896-043000 (AM 101081)
CURRENT APPLICATION NUMBER: US/10/956,157
CURRENT FILING DATE: 2004-10-04
NUMBER OF SEQ ID NOS: 319805
SOFTWARE: Patentin version 3.2
SEQ ID NO 144790
LENGTH: 25
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         APPLICANT: Wyeth
APPLICANT: Wyeth
APPLICANT: MOUNTS, William
APPLICANT: MOUNTS, William
TITLE OF INVENTION: NUCLEIC ACID ARRAYS FOR DETECTING GENE EXPRESSION ASSOCIATED WITH
TITLE OP INVENTION: HUMAN OSTEOARTHRITIS AND HUMAN PROTEASES
FILE REFERENCE: 031896-043000 (AM 101081)
CURRENT APPLICATION NUMBER: US/10/956,157
CURRENT FILING DATE: 2004-110-04
NUMBER OF SEQ ID NOS: 319805
SOFTWARES PATENTIN VERSION 3.2
SEQ ID NO 104791
LENGTH: 25
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Sequence 104792, Application US/10956157
Publication No. US20050118625A1
GENERAL INFORMATION:
APPLICANT: Wyeth
APPLICANT: Wyeth
TITLE OF INVENTION: NUCLEIC ACID ARRAYS FOR DETECTING GENE EXPRESSION ASSOCIATED WITHING OF INVENTION: NUCLEIC ACID ARRAYS FOR DETECTING GENE EXPRESSION ASSOCIATED WITHING OF INVENTION: HUMAN OSTBOARTHRITIS AND HUMAN PROTEASES
FILE REFERENCE: 031896-043000 (AM 101081)
CURRENT PELLICY DATE: 2004-10-04
NUMBER OF SEQ ID NOS: 319805
SEQ ID NOS: 319805
SEQ ID NO 104792
IENGTH: 25
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    DB 1; Length 25;
                                                                                                                                                                                                                                                                                                                                                                                                                                          Length 25;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       0.5%; Score 25; DB 1; Length 25;
100.0%; Pred. No. 1.3e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                          DB 1; Le
1.3e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                          ch 0.5%; Score 25; DB 1. Similarity 100.0%; Pred. No. 1.3 25; Conservative 0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   100.0%; Pred. ...
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    4478 TICAGAATAAGCAGAAAGTAGGACC 4502
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 4479 TCAGAATAAGCAGAAAGTAGGACCA 4503
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    0.5%; Score 25;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1 Trcagaaraagcagaaggraggacc 25
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    US-10-956-157-104791
; Sequence 104791, Application US/10956157
; Publication No. US20050118625A1
; GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1 TCAGAATAAGCAGAAGTAGGACCA 25
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Best Local Similarity 100.0
Matches 25; Conservative
                                                                                                                                                                                                                                                                                                                                                    ; TYPE: DNA
; ORGANISM: Probe Sequence
US-10-956-157-104790
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ; ORGANISM: Probe Sequence
US-10-956-157-104791
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ORGANISM: Probe Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                          Query Match
Best Local Similarity
Matches 25; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                RESULT 43
US-10-956-157-104792
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    US-10-956-157-104792
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   RESULT 42
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              US-10-956-157-104789
US-10-956-157-104789
US-10-956-157-104789
US-10-956-157-104789
Sequence 104789, Application US/10956157
Publication No. US20050118625A1
GENERAL INFORMATION:
APPLICANT: Wouth
APPLICANT: Mounts, William
TITLE OF INVENTION: HUWAN OSTEOARTHRITIS AND HUWAN PROTEASES
TITLE OF INVENTION: HUWAN OSTEOARTHRITIS AND HUWAN PROTEASES
TITLE OF INVENTION UNDER: US/10/956,157
CURRENT APPLICATION NUMBER: US/10/956,157
CURRENT FILING DATE: 2004-10-04
NUMBER OF SEQ ID NOS: 319805
SOGTWARE: PatentIn version 3.2
SEQ ID NO 104789
LENGTH: 25
                                                                                                                                                                                                                                                                                                                                         US-10-956-157-104788

Sequence 104788, Application US/10956157

Publication No. US20050118625A1

Sequence 104788, Application US/10956157

Sequence 104788, Application US/10956157

Sequence 104788, Application No. US20050118625A1

SEQUENCE INTERPRETABLE INFORMATION: William

TITLE OF INVENTION: HUMAN OSTEOARTHRITIS AND HUMAN PROTEASES

FILE REFERENCE: 031896-043000 (AM 101081)

CURRENT APPLICATION VMBER: US/10/956,157

CURRENT APPLICATION VMBER: 2004-10-04

NUMBER OF SEQ ID NOS: 319805

SEQ ID NO 104788

LENGTH: 25

LENGTH: 25
                                                                                                                                                                     ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ö
                                                                                                                                                                     Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Gaps
                                                                                                                                                                     ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   0.5%; Score 25; DB 1; Length 25; 100.0%; Pred. No. 1.3e+02; ive 0; Mismatches 0; Indels
                                                                                                                        Length 25;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Length 25;
                                                                                                                                                                   0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               0; Indels
                                                                                                                        DB 1; L
1.3e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Score 25; DB 1; Le
Pred. No. 1.3e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  0.5%; Scor.
100.0%; Pred. No. 1.-
                                                                                                                      0.5%; Score 25; DB 100.0%; Pred. No. 1.3 tive 0; Mismatches
                                                                                                                                                                                                           4480 CAGAATAAGCAGAAAGTAGGACCAA 4504
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          4483 AATAAGCAGAAAGTAGGACCAAGTG 4507
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          4445 AAATAATTGAAGGCACTGAAGTTGT 4469
                                                                                                                                                                                                                                                        1 CAGAATAAGCAGAAAGTAGGACCAA 25
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  25
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ; Sequence 104790, Application US/10956157; Publication No. US20050118625A1; GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1 AATAAGCAGAAAGTAGGACCAAGTG 25
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1 AAATAATTGAAGGCACTGAAGTTGT
                                                                                                               Query Match
Best Local Similarity 100.0
Matches 25, Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             25; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TYPE: DNA
ORGANISM: Probe Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Query Match
Best Local Similarity
Matches 25, Conserva
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Best Local Similarity
Matches 25; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      US-10-956-157-104788
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ; TYPE: DNA
; ORGANISM: Probe E
US-10-956-157-104789
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    RESULT 41
US-10-956-157-104790
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 APPLICANT: Wyeth
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Query Match
                                                                                                                                                                                                                ठ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ઠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                셤
```

ô

```
TITLE OF INVENTION: NUCLEIC ACID ARRAYS FOR DETECTING GENE EXPRESSION ASSOCIATED WITH TITLE OF INVENTION: HUMAN OSTEOARTHRITIS AND HUMAN PROTEASES
TITLE OF INVENTION: HUMAN OSTEOARTHRITIS AND HUMAN PROTEASES
CURRENT APPLICATION NUMBER: US/10/956,157
CURRENT FILING DATE: 2004-10-04
NUMBER OF SEQ ID NOS: 319805
SOFTWARER PATENTIN VERSION 3.2
LENGTH: 25
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              MS-10-956-157-104797

Sequence 104797, Application US/10956157

Sequence 104797, Application US/10956157

Sequence 104797, Application No. US20050118625A1

GENERAL INFORMATION:

APPLICANT: Wyeth

APPLICANT: Wyeth

APPLICANT: Wounts, William

APPLICANT: Wyeth

APPLICANT: Wounts, William

APPLICANT: Wounts, William

TITLE OF INVENTION: HUMAN OSTEOARTHRITIS AND HUMAN PROTEASES

FILE REFERENCE: 031896-043000 (AM 101081)

CURRENT APPLICATION NUMBER: US/10/956,157

CURRENT FILING DATE: 2004-110-04

NUMBER OF SEQ ID NOS: 319805

SOFTWARE: PatentIn version 3.2

SEQ ID NO 104797

LENGTH: 25
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           APPLICANT: Mounce, William
TITLE OF INVENTION: NUCLEIC ACID ARRAYS FOR DETECTING GENE EXPRESSION ASSOCIATED WITH
TITLE OF INVENTION: HUMAN OSTEORETHRIIS AND HUMAN PROTEASES
FILE REFERENCE: 031896-043000 (AM 101081)
CURRENT APPLICATION NUMBER: US/10/956,157
CURRENT FILING DATE: 2004-10-04
NUMBER OF SEQ ID NOS: 319805
SOFTWARE: Patentin version 3.2
SEQ ID NO 104796
LENGTH: 25
                                                                                                                                                                                                                                                                                                                                                                                                Gape
                                                                                                                                                                                                                                                                                                                                                                                                ô
                                                                                                                                                                                                                                                                                                                                        Query Match 0.5%; Score 25; DB 1; Length 25; Best Local Similarity 100.0%; Pred. No. 1.3e+02; Matches 25; Conservative 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Length 25;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Length 25;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           0.5%; Score 25; DB 1; Le
100.0%; Pred. No. 1.3e+02;
ive 0; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   0.5%; Score 25; DB 1; Loto 100.0%; Pred. No. 1.3e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                4485 TAAGCAGAAAGTAGGACCAAGTGAT 4509
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     4484 ATAAGCAGAAAGTAGGACCAAGTGA 4508
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ; Sequence 104796, Application US/10956157; Publication No. US20050118625A1
; GENERAL INFORMATION:
; APPLICANT: Wyeth
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1 TAAGCAGAAAGTAGGACCAAGTGAT 25
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1 ATAAGCAGAAAGTAGGACCAAGTGA 25
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ilarity 100.0%; P
Conservative 0;
                                                                                                                                                                                                                                        TYPE: DNA; ORGANISM: Probe Sequence US-10-956-157-104795
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ORGANISM: Probe Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Best Local Similarity
Matches 25; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          RESULT 47
US-10-956-157-104796
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                US-10-956-157-104796
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ; ORGANISM: Probe (
US-10-956-157-104797
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TYPE: DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                  ઠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        à
                                                                                                                                                                                                        RESULT 44

US-10-956-157-104793

US-10-956-157-104793

Sequence 104793, Application US/10956157

Publication No. US20050118625A1

GENERAL INFORMATION:

APPLICANT: Wyeth

APPLICANT: Wounts, William

TITLE OF INVENTION: HUMAN OSTEOARTHRITIS AND HUMAN PROTEASES

TITLE OF INVENTION: HUMAN OSTEOARTHRITIS AND HUMAN PROTEASES

TITLE OF INVENTION: US-10.04

TITLE OF INVENTION: HUMAN OSTEOARTHRITIS AND HUMAN PROTEASES

CURRENT PELICATE: 0204-10-04

NUMBER OF SEQ ID NOS: 319805

SOFTWARE: PATENTIN VERSION 3.2

SEQ ID NO 104793

LENGTH: 25
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             RESULT 45

US-10-956-157-104794

US-10-956-157-104794

US-10-956-157-104794

Sequence 104794, Application US/10956157

Publication No. US20050118625A1

GENERAL INFORMATION:

APPLICANT: Weeh

APPLICANT: Weeh

TITLE OF INVENTION: NUCLEIC ACID ARRAYS FOR DETECTING GENE EXPRESSION ASSOCIATED WITH

TITLE OF INVENTION: NUCLEIC ACID ARRAYS FOR DETECTING GENE EXPRESSION ASSOCIATED WITH

TITLE OF INVENTION: UNCLEIC ACID ARRAYS FOR DETECTING GENE EXPRESSION ASSOCIATED WITH

TITLE OF INVENTION: UNUMBER: US/10/956,157

CURRENT APPLICATION NUMBER: US/10/956,157

CURRENT PILING DATE: 2004-10-04

NUMBER OF SEQ ID NOS: 319905

SEQ ID NO 104794
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ö
                                     ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Gaps
                                        Gapa
                                        ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Length 25;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Length 25;
                                  0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                0.5%; Score 25; DB 1; Le
100.0%; Pred. No. 1.3e+02;
tive 0; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Score 25; DB 1; Lo
Pred. No. 1.3e+02;
          Pred. No. 1.3e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      0.5%; Scc.
100.0%; Pred. No. ...
0; Mismatches
        Best Local Similarity 100.0%; Pred. No. 1.3
Matches 25; Conservative 0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TIGICCAGGAAATICAGAATAAGCA 4490
                                                                                     4465 GTTGTCCAGGAATTCAGAATAAGC 4489
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           4621 GGGATTGTGAAGGTGTGGAAATAAA 4645
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TTGTCCAGGAATTCAGAATAAGCA 25
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ; Sequence 104795, Application US/10956157; Publication No. US20050118625A1; GENERAL INFORMATION:
                                                                                                                     1 GTTGTCCAGGAAATTCAGAATAAGC 25
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              GGGATTGTGAAGGTGTGGAAATAAA 25
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Mounts, William
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Local Similarity 100.
hes 25; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Local Similarity 100.
ses 25; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ; TYPE: DNA
; ORGANISM: Probe Sequence
US-10-956-157-104794
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ; ORGANISM: Probe Sequence US-10-956-157-104793
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   US-10-956-157-104795
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   APPLICANT: Wyeth APPLICANT: Mount
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Query Match
Best Local S
Matches 25
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        4466
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TYPE: DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Best Loca
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     엄
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ठ
                                                                                     ઠે
```

ô

```
APPLICANT: Myeth
APPLICANT: Myeth
APPLICANT: Mounts, Milliam
APPLICANT: Mounts, Milliam
APPLICANT: Mounts, Milliam
APPLICANT: Mounts, Milliam
TITLE OF INVENTION: NUCLEIC ACID ARRAYS FOR DETECTING GENE EXPRESSION ASSOCIATED WITH
TITLE OF INVENTION: HUMAN OSTEOARTHRITIS AND HUMAN PROTEASES
FILE REFERENCE: 031896-043000 (AM 101081)
CURRENT APPLICATION NUMBER: US/10/956,157
CURRENT FILING DATE: 2004-110-04
NUMBER OF SEQ ID NOS: 319805
SOFTWARES Patentin version 3.2
SEQ ID NO 104801
LENGTH: 25
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    RESULT 53
US-10-956-157-104802

US-10-956-157-104802

SQUENCE 104802, Application US/10956157

Publication No. US-20050118625A1

GENERAL INFORMATION:

APPLICANT: Wyeth

TITLE OF INVENTION: HUMAN OSTEOARTHRITIS AND HUMAN PROTEASES

FILE REPERENCE: 031896-043000 (AM 10.081)

CURRENT APPLICATION WHORE: US/10/956,157

CURRENT FILING DATE: 2004-10-04

NUMBER OF SEQ ID NOS: 319805

SEQ ID NO 104802

LENGTH: 25
                                                                                                                                                                                                                                                                                                                                             Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Gaps
                                                                                                                                                                                                                                                                                                                                          ;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ó
  TITLE OF INVENTION: HUMAN OSTEOARTHRITIS AND HUMAN PROTEASES FILE REFERENCE: 031896-043000 (AM 101081)
CURRENT APPLICATION NUMBER: US/10/956,157
CURRENT FILING DATE: 2004-10-04
NUMBER OF SEQ ID NOS: 319805
SOFTWARE: Patentin version 3.2
SEQ ID NO 104800
LENGTH: 25
                                                                                                                                                                                                                                                                                             Length 25;
                                                                                                                                                                                                                                                                                                                                          0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Length 25;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Length 25;
                                                                                                                                                                                                                                                                                           DB 1; Le
1.3e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  DB 1; Le
1.3e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     0.5%; Score 25; DB 1; Le
100.0%; Pred. No. 1.3e+02;
tive 0; Mismatches 0;
                                                                                                                                                                                                                                                                                        Query Match

0.5%; Score 25; DB
Best Local Similarity 100.0%; Pred. No. 1.3
Matches 25; Conservative 0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                0.5%; Score 25; DB 100.0%; Pred. No. 1.3
                                                                                                                                                                                                                                                                                                                                                                                  4467 TGTCCAGGAAATTCAGAATAAGCAG 4491
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            4464 AGTIGICCAGGAAATICAGAATAAG 4488
                                                                                                                                                                                                                                                                                                                                                                                                                                 rerccassaarrcasaaraascas 25
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sequence 104801, Application US/10956157
Publication No. US20050118625A1
GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1 AGTTGTCCAGGAAATTCAGAATAAG 25
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Query Match
Best Local Similarity 100.0
Matches 25; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Query Match 0.59
Best Local Similarity 100.0
Matches 25; Conservative
                                                                                                                                                                                          TYPE: DNA
ORGANISM: Probe Sequence
US-10-956-157-104800
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ORGANISM: Probe Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TYPE: DNA
ORGANISM: Probe Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       RESULT 52
US-10-956-157-104801
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              US-10-956-157-104801
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        US-10-956-157-104802
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TYPE: DNA
                                                                                                                                                                                                                                                                                                                                                                                    ò
                                                                                                                                                                                                                                                                                                                                                                                                                       qq
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ð
                                                                                                                                                                                                    Sequence 104798, Application US/10956157
Publication No. US20050118625A1
GENERAL INFORMATION:
GENERAL INFORMATION:
GENERAL INFORMATION:
APPLICANT: Wyeth
APPLICANT: Wouths, William
TITLE OF INVENTION: NUCLEIC ARRAYS FOR DETECTING GENE EXPRESSION ASSOCIATED WITH
TITLE OF INVENTION: HUMAN OSTEOARTHRITIS AND HUMAN PROTEASES
FILE REFERENCE: 031896-043000 (AM 101081)
CURRENT APPLICATION NUMBER: 105/0956,157
CURRENT PILING DATE: 2004-10-04
NUMBER OF SEQ ID NOS: 319805
SOFTWARE: Patentin version 3.2
SEQ ID NO 104798
LENGTH: 25
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Sequence 104799, Application US/10956157

Publication No. US20050118625A1

GENERAL INCRMATION:
APPLICANT: Wyeth
TITLE OF INVENTION: NUCLEIC ACID ARRAYS FOR DETECTING GENE EXPRESSION ASSOCIATED WITH
TITLE OF INVENTION: HUMAN GOTEGARTHRITIS AND HUMAN PROTEASES
FILE REFERENCE: 031896-043000 (AM 101081)
CURRENT APPLICATION NUMBER: US/10/956,157
CURRENT PILING DATE: 2004-10-04
NUMBER OF SEQ ID NOS: 319805
SEQ ID NO 104799
LENGTH: 25
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           APPLICANT: Wyeth
APPLICANT: Mounts, William
TITLE OF INVENTION: NUCLEIC ACID ARRAYS FOR DETECTING GENE EXPRESSION ASSOCIATED WITH
       ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ö
       Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Gaps
       ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Query Match 0.5%; Score 25; DB 1; Length 25; Best Local Similarity 100.0%; Pred. No. 1.3e+02; Matches 25; Conservative 0; Mismatches 0; Indels
    Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Length 25;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Indels
  .
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Ouery Match
0.5%; Score 25; DB 1; Le
Best Local Similarity 100.0%; Pred. No. 1.3e+02;
Matches 25; Conservative 0; Mismatches 0;
  0; Mismatches
                                            4468 GTCCAGGAAATTCAGAATAAGCAGA 4492
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    4469 TCCAGGAAATTCAGAATAAGCAGAA 4493
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           4470 CCAGGAAATTCAGAATAAGCAGAAA 4494
                                                                                  1 GTCCAGGAAATTCAGAATAAGCAGA 25
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1 TCCAGGAAATTCAGAATAAGCAGAA 25
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1 CCAGGAAATTCAGAATAAGCAGAAA 25
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ; Sequence 104800, Application US/10956157; Publication No. US20050118625A1; GENERAL INFORMATION:
25; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TYPE: DNA
ORGANISM: Probe Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TYPE: DNA
ORGANISM: Probe Sequence
US-10-956-157-104799
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           US-10-956-157-104798
                                                                                                                                                                                  US-10-956-157-104798
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            US-10-956-157-104799
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 US-10-956-157-104800
Matches
                                               ð
                                                                                      q
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ઠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      엄
```

ö

ઠ 셤

```
GENERAL AND ANTONING TO ARRAYS FOR DETECTING GENE EXPRESSION ASSOCIATED WITH APPLICANT: Wyeth APPLICANT: Wyeth APPLICANT: Wounte, William TITLE OF INVENTION: NUCLEIC ACID ARRAYS FOR DETECTING GENE EXPRESSION ASSOCIATED WITH TITLE OF INVENTION: HUMAN OSTEOARTHITIS AND HUMAN PROTEASES FILE REPERENCE: 031896-043000 (AM 101081) CURRENT FILING DATE: 2004-10-04 CURRENT FILING DATE: 2004-10-04 NUMBER OF SEQ ID NOS: 319805 SOFTWARE: PATENTIN VERSION 3.2 SEQ ID NO 124169 LENGTH: 25
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             NGS-10-956-157-126622
| Sequence 126622, Application US/10956157
| Publication No. US20050118625A1
| Publication No. US20050118625A1
| GENERAL INFORMATION:
| APPLICANT: Wyeth
| APPLICANT: Wyeth
| APPLICANT: Wyeth
| APPLICANT: Wounts, William
| TITLE OF INVENTION: HUMAN OSTEOARTHRITIS AND HUMAN PROTEASES
| TITLE OF INVENTION: HUMAN OSTEOARTHRITIS AND HUMAN PROTEASES
| TITLE OF INVENTION: HUMAN OSTEOARTHRITIS AND HUMAN PROTEASES
| TITLE OF INVENTION: HUMAN OSTEOARTHRITIS AND HUMAN PROTEASES
| TITLE OF INVENTION: HUMAN OSTEOARTHRITIS AND HUMAN PROTEASES
| TITLE OF INVENTION: HUMAN OSTEOARTHRITIS AND HUMAN PROTEASES
| TITLE OF INVENTION: HUMAN OSTEOARTHRITIS AND HUMAN PROTEASES
| TITLE OF INVENTION: HUMAN OSTEOARTHRITIS AND HUMAN PROTEASES
| TITLE OF INVENTION: HUMAN OSTEOARTHRITIS AND HUMAN PROTEASES
| TITLE OF INVENTION: HUMAN OSTEOARTHRITIS AND HUMAN PROTEASES
| TITLE OF INVENTION: HUMAN OSTEOARTHRITIS AND HUMAN PROTEASES
| TITLE OF INVENTION: HUMAN OSTEOARTHRITIS AND HUMAN PROTEASES
| TITLE OF INVENTION: HUMAN OSTEOARTHRITIS AND HUMAN PROTEASES
| TITLE OF INVENTION: HUMAN OSTEOARTHRITIS AND HUMAN PROTEASES
| TITLE OF INVENTION: HUMAN OSTEOARTHRITIS AND HUMAN PROTEASES
| TITLE OF INVENTION: HUMAN OSTEOARTHRITIS AND HUMAN PROTEASES
| TITLE OF INVENTION: HUMAN OSTEOARTHRITIS AND HUMAN PROTEASES
                                                                                                                                                                                                                                                                                                                                                                                                                ô
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ô
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Gapa
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ö
                                                                                                                                                                                                                                                                                                                                                                                                                   ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Query Match 0.5%; Score 25; DB 1; Length 25; Best Local Similarity 100.0%; Pred. No. 1.3e+02; Matches 25; Conservative 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                               DB 1; Length 25;
1.3e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        0.5%; Score 25; DB 1; Length 25;
100.0%; Pred. No. 1.38+02;
                                                                                                                                                                                                                                                                                                                                               Query Match 0.5%; Score 25; DB Best Local Similarity 100.0%; Pred. No. 1.3 Matches 25; Conservative 0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        100.0%; Pred. No. 1.3 cive 0; Mismatches
FILE REFERENCE: 031896-043000 (AM 101081)
CURRENT PEDILCATION NUMBER: US/10/956,157
CURRENT FILING DATE: 2004-10-04
NUMBER OF SEQ ID NOS: 319805
SOFTWARE: PatentIn version 3.2
SEQ ID NO 104805
LENGTH: 25
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              4771 ACTGACTGACTAAATGACACCCAAA 4795
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 4757 ATTACTGTTTCATGACTGACTGACT 4781
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Sequence 124169, Application US/10956157
Publication No. US20050118625A1
GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1 ATTACTGTTTCATGACTGACT 25
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1 ACTGACTGACTAAATGACACCCAAA 25
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      25; Conservative
                                                                                                                                                                                                                   TYPE: DNA
CRGANISM: Probe Sequence
US-10-956-157-104805
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ; ORGANISM: Probe Sequence US-10-956-157-124169
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TYPE: DNA
ORGANISM: Probe Sequence
US-10-956-157-126622
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Query Match
Best Local Similarity
Matches 25; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        US-10-956-157-124169
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             RESULT 58
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        APPLICANT: Mounts, William
TITLE OF INVENTION: MUCLEIC ACID ARRAYS FOR DETECTING GENE EXPRESSION ASSOCIATED WITH
TITLE OF INVENTION: HUMAN OSTEOARTHRITIS AND HUMAN PROTEASES
FILE REPERENCE: 031896-04300 (AM 101081)
CURRENT APPLICATION NUMBER: US/10/956,157
CURRENT FILING DATE: 2004-10-04
NUMBER OF SEQ ID NOS: 319805
SOFTWARE: PATENTIN VERSION 3.2
SEQ ID NO 104804
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           RESULT 56
US-10-956-157-104805
US-10-956-157-104805
Sequence 104805, Application US/10956157
Sequence 10 No. US20050118625A1
GENERAL INFORMATION:
APPLICANT: Wyeth
APPLICANT: Wouth
TAPLICANT: Wouth
TITLE OF INVENTION: NUCLEIC ACID ARRAYS FOR DETECTING GENE EXPRESSION ASSOCIATED WITH
TITLE OF INVENTION: HUMAN OSTEOARTHRITIS AND HUMAN PROTEASES
                                                                                                                                                                                                                                                                                                                                                                         APPLICANT: Mounts, William
TITLE OF INVENTION: NUCLEIC ACID ARRAYS FOR DETECTING GENE EXPRESSION ASSOCIATED WITH
TITLE OF INVENTION: NUCLEIC ACID ARRAYS FOR DETECTING GENE EXPRESSION ASSOCIATED WITH
TITLE OF INVENTION: HUMAN OSTEOARTHRITIS AND HUMAN PROTEASES
CURRENT APPLICATION NUMBER: US/10/956,157
CURRENT APPLICATION NUMBER: US/10/956,157
CURRENT FILING DATE: 2004-10-04
NUMBER OF SEQ ID NOS: 319805
SEQ ID NO 104803
LENGTH: 25
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ô
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ch 0.5%; Score 25; DB 1; Length 25; 1 Similarity 100.0%; Pred. No. 1.3e+02; 25; Conservative 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                0.5%; Score 25; DB 1; Length 25;
100.0%; Pred. No. 1.3e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 100.0%; Pred. ....
                                       4462 GAAGTTGTCCAGGAAATTCAGAATA 4486
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      4463 AAGTIGICCAGGAAATICAGAATAA 4487
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            4472 AGGAAATTCAGAATAAGCAGAAAGT 4496
                                                                                                                                                                                                                                                 Sequence 104803, Application US/10956157
Publication No. US20050118625A1
GENERAL INFORMATION:
                                                                    1 GAAGTTGTCCAGGAAATTCAGAATA 25
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1 AAGTTGTCCAGGAAATTCAGAATAA 25
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ; Sequence 104804, Application US/10956157; Publication No. US20050118625A1; GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1 AGGAAATTCAGAATAAGCAGAAAGT 25
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           25; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ; TYPE: DNA
; ORGANISM: Probe Sequence
US-10-956-157-104804
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TYPE: DNA
ORGANISM: Probe Sequence
US-10-956-157-104803
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Query Match
Best Local Similarity
Matches 25; Conserv
                                                                                                                                                                                      RESULT 54
US-10-956-157-104803
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            RESULT 55
US-10-956-157-104804
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Matches
```

ò

ò

```
Sequence 139829, Application US/10956157
GENERAL INFORMATION: US20050118625A1
GENERAL INFORMATION: US20050118625A1
GENERAL INFORMATION: USCULENCE APPLICANT: Woeth
APPLICANT: Mounts, William
TITLE OF INVENTION: NUCLEIC ACID ARRAYS FOR DETECTING GENE EXPRESSION ASSOCIATED WITH
TITLE OF INVENTION: HUMAN OSTEOARTHRITIS AND HUMAN PROTEASES
FILE REFERENCE: 031896-043000 (AM 101081)
CURRENT APPLICATION NUMBER: US/10/956,157
CURRENT FILING DATE: 2004-10-04
NUMBER OF SEQ ID NOS: 319805
SOFTWARE: PATENT VERSION 3.2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             APPLICANT: Mounts, William
TITLE OF INVENTION: UNCLEIC ACID ARRAYS FOR DETECTING GENE EXPRESSION ASSOCIATED WITH
TITLE OF INVENTION: HUMAN OSTEOARTHRITIS AND HUMAN PROTEASES
FILE REFERENCE: 031896-043000 (Am. 101081)
CURRENT PILLORICATION WIMBER: US/10/956,157
CURRENT FILING DATE: 2004-10-04
NUMBER OF SEQ ID NOS: 319805
SOFTWARE: Patentin version 3.2
SEQ ID NO 133529
LENGTH: 25
                                                                                                                                                                                                                                                                                                                .;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ö
                                                                                                                                                                                                                                                                                                              Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Gaps
                                                                                                                                                                                                                                                                                                              ;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ö
                                                                                                                                                                                                                                                              Length 25;
                                                                                                                                                                                                                                                                                                              Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Length 25;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Length 25;
                                                                                                                                                                                                                                                                                       1.3e+02;
nes 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  0.5%; Score 25; DB 1; Le
100.0%; Pred. No. 1.3e+02;
tive 0; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              0.5%; Score 25; DB 1; L. 100.0%; Pred. No. 1.3e+02; tive 0; Mismatches 0;
                                                                                                                                                                                                                                                              DB 1;
                                                                                                                                                                                                                                                    Query Match
0.5%; Score 25; DB
Best Local Similarity 100.0%; Pred. No. 1.3
Matches 25; Conservative 0; Mismatches
          CURRENT APPLICATION NUMBER: US/10/956,157
CURRENT FILING DATE: 2004-10-04
NUMBER OF SEQ ID NOS: 319805
SOFTWARE: PatentIn version 3.2
SEQ ID NO 131620
LENGTH: 25
                                                                                                                                                                                                                                                                                                                                                    4768 ATGACTGACTGACTAAATGACACCC 4792
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     4643
                                                                                                                                                                                                                                                                                                                                                                                                 1 Argacrgacrgacraarcaccc 25
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           4953 AGATGGTTGTAAGCTATTATAGTAT 4977
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Sequence 133529, Application US/10956157
Publication No. US20050118625A1
GENERAL INFORMATION:
APPLICANT: Wyeth
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1 Arggarrgraaggrargaara 25
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                4619 ATGGGATTGTGAAGGTGTGGAAATA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Query Match 0.5
Best Local Similarity 100.
Matches 25; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Conservative
                                                                                                                                                                                ; ORGANISM: Probe Sequence US-10-956-157-131620
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TYPE: DNA
ORGANISM: Probe Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   RESULT 62
US-10-956-157-133529
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     US-10-956-157-133529
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        US-10-956-157-139829
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TYPE: DNA
ORGANISM: Probe
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              US-10-956-157-139829
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    SEQ ID NO 139829
LENGTH: 25
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              25;
                                                                                                                                                            TYPE: DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Best Local
Matches 2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 RESULT 63
                                                                                                                                                                                                                                                                                                                                                                                               g
                                                                                                                                                                                                                                                                                                                                                    ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           à
                                                                                                                                                                                                                                APPLICANT: Wyeth
APPLICANT: Wyeth
APPLICANT: Wounts,
MILLIAM
APPLICANT: WOUNTS,
MILLIAM
APPLICANT: WOUNTS,
MILLIAM
TITLE OF INVENTION: WUCLEIC ACID ARRAYS FOR DETECTING GENE EXPRESSION ASSOCIATED WITH
TITLE OF INVENTION: HUMAN OSTEOARTHRITIS AND HUMAN PROTEASES
FILE REFERENCE: 031896-043000 (AM 101081)
CURRENT APPLICATION WUMBER: US/10/956,157
CURRENT FILING DATE: 2004-10-04
NUMBER OF SEQ ID NOS: 319805
SOFTWARE: PATENT VEFSION 3.2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Sequence 129535, Application Us/10956157
Publication No. US20050118625A1
Publication No. US20050118625A1
Publication No. US20050118625A1
APPLICANT: Wyeth
APPLICANT: Wyeth
APPLICANT: Wyeth
APPLICANT: Wyeth
AIlliam
AITLE OF INVENTION: NUCLEIC ACID ARRAYS FOR DETECTING GENE EXPRESSION ASSOCIATED WITH
TITLE OF INVENTION: NUCLEIC ACID ARRAYS FOR DETECTING GENE EXPRESSION ASSOCIATED WITH
TITLE OF INVENTION: HUMAN OSTEOARTHRITIS AND HUMAN PROTEASES
CURRENT PILLING DATE: 2004-10-04
NUMBER OF SEQ ID NOS: 319805
SOFTWARE: Patentin version 3.2
SOFTWARE: Patentin version 3.2
ERNGTH: 25
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          APPLICANT: Wyeth
APPLICANT: Wyeth
APPLICANT: Wouts, William
TITLE OF INVENTION: NUCLEIC ACID ARRAYS FOR DETECTING GENE EXPRESSION ASSOCIATED WITH
TITLE OF INVENTION: HUMAN OSTEOARTHRITS AND HUMAN PROTEASES
FILE REFERENCE: 031896-043000 (AM 101081)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ô
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Query Match 0.5%; Score 25; DB 1; Length 25; Best Local Similarity 100.0%; Pred. No. 1.3e+02; Matches 25; Conservative 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            0.5%; Score 25; DB 1; Length 25; 100.0%; Pred. No. 1.3e+02; tive 0; Mismatches 0; Indels
4685 ATACTATAACTCGAGAAAAGGCATT 4709
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              4600 ATCGTAACTGCTTCTAGAGATGGGA 4624
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       4425 ATCTGTGTCCTACTACAGGAAATA 4449
                                                                                                                                        US-10-956-157-128602
Sequence 128602
; Publication No. US20050118625A1
; GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1 Arcgracricricradadarggda 25
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1 ATCTGTGTCCTACTACAGGAAATA 25
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ; Sequence 131620, Application US/10956157; Publication No. US20050118625A1; GENERAL INFORMATION:
                                             1 ATACTATAACTCGAGAAAAGGCATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Query Match 0.5
Best Local Similarity 100.
Matches 25; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ORGANISM: Probe Sequence
US-10-956-157-128602
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ; TYPE: DNA; ORGANISM: Probe Sequence US-10-956-157-129535
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      US-10-956-157-129535
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           RESULT 61
US-10-956-157-131620
                                                                                                                                                                                                                                                                                                                                                                                                                                                   SEQ ID NO 128602
LENGTH: 25
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TYPE: DNA
  ઠે
                                        d
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     셤
```

```
Sequence 148887, Application US/10956157
Publication No. US20050118625A1
Publication No. US20050118625A1
Publication No. US20050118625A1
APPLICANT: Wyeth
APPLICANT: Whyell OSTEOARTHRITIS AND HUMAN PROTEASES
FILE REFERENCE: 031896-043000 (AM 101081)
FILE REFERENCE: 031896-043000 (AM 101081)
CURRENT PELING DATE: 2004-10-04
NUMBER OF SEQ ID NOS: 319805
SOFTWARE: PatentIn version 3.2
SEQ ID NO 148887
LENGTH: 25
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Sequence 149222, Application US/10956157
Publication No. US20050118625A1
GENERAL INFORMATION:
APPLICANT: Wyeth
TITLE OF INVENTION: NUCLEIC ACID ARRAYS FOR DETECTING GENE EXPRESSION ASSOCIATED WITH
TITLE OF INVENTION: NUCLEIC ACID ARRAYS FOR DETECTING GENE EXPRESSION ASSOCIATED WITH
TITLE OF INVENTION: NUCLEIC ACID ARRAYS FOR DETECTING GENE EXPRESSION ASSOCIATED WITH
TITLE OF INVENTION: NUCLEIC ACID ARRAYS FOR DETECTING GENE EXPRESSION ASSOCIATED WITH
CURRENT APPLICATION NUMBER: US/10/956,157
CURRENT PILING DATE: 2004-10-04
NUMBER OF SEQ ID NOS: 319805
SOFTWARE: Patentin version 3.2
                                                                                                                                                                                                                                                                                        ô
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Gaps
                                                                                                                                                                                                                                                                                        Gape
                                                                                                                                                                                                                                                                                        ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ö
                                                                                                                                                                                                                                Query Match 0.5%; Score 25; DB 1; Length 25; Best Local Similarity 100.0%; Pred. No. 1.3e+02; Matches 25; Conservative 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             0.5%; Score 25; DB 1; Length 25; 100.0%; Pred. No. 1.3e+02; Live 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Length 25;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Query Match 0.5%; Score 25; DB 1; L. Best Local Similarity 100.0%; Pred. No. 1.3e+02; Matches 25; Conservative 0; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   4771 ACTGACTGACTAAATGACACCCAAA 4795
                                                                                                                                                                                                                                                                                                                                       4775 ACTGACTAAATGACACCCAAAATGG 4799
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    4760 ACTGTTTCATGACTGACTAAA 4784
                                                                                                                                                                                                                                                                                                                                                                  1 ACTGACTAAATGACACCCAAAATGG 25
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1 ACTGTTTCATGACTGACTGACTAAA 25
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CURRENT FILING DATE: 2004-10-04 NUMBER OF SEQ ID NOS: 319805 SOFTWARE: Patentin version 3.2 SEQ ID NO 147843 LENGTH: 25
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Query Match
Best Local Similarity 100.v.
                                                                                                                                 TYPE: DNA
CORGANISM: Probe Sequence
US-10-956-157-147843
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ; TYPE: DNA
; ORGANISM: Probe Sequence
US-10-956-157-148887
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TYPE: DNA ORGANISM: Probe Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                            RESULT 67
US-10-956-157-148887
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           RESULT 68
US-10-956-157-149222
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            US-10-956-157-149222
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       SEQ ID NO 149222
LENGTH: 25
                                                                                                                                                                                                                                                                                                                                          ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TITLE OF INVENTION: MUCLEIC ACID ARRAYS FOR DETECTING GENE EXPRESSION ASSOCIATED WITH
TITLE OF INVENTION: HUGLEIC ACID ARRAYS FOR DETECTING GENE EXPRESSION ASSOCIATED WITH
TITLE OF INVENTION: HUMAN OSTEOARTHITIS AND HUMAN PROTEASES
FILE REFERENCE: 031896-043000 (AM 101081)
CURRENT APPLICATION NUMBER: US/10/956,157
CURRENT FILING DATE: 2004-10-04
NUMBER OF SEQ ID NOS: 319805
SOFTWARE: Patentin version 3.2
SEQ ID NO 144934
LENGTH: 25
TYPE: NUMBER OF SECTION NUMBER OF SECTION ASSOCIATED WITH
                                                                                                                                                                                                                                             APPLICANT: Mounts, William
TITLE OF INVENTION: NUCLEIC ACID ARRAYS FOR DETECTING GENE EXPRESSION ASSOCIATED WITH
TITLE OF INVENTION: HUMAN OSTECARTRITIS AND HUMAN PROTEASES
FILE REFERENCE: 0319846 043000 (AM 101081)
CURRENT APPLICATION NUMBER: US/10/956,157
CURRENT FILING DATE: 2004-10-04
NUMBER OF SEQ ID NOS: 319805
SEQ ID NO 140192
LENGTH: 25
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         APPLICANT: Wyeth
APPLICANT: Wyeth
APPLICANT: Wounts, William
APPLICANT: Mounts, William
TITLE OF INVENTION: NUCLEIC ACID ARRAYS FOR DETECTING GENE EXPRESSION ASSOCIATED WITH
TITLE OF INVENTION: HUMAN OSTEOARTHRITIS AND HUMAN PROTEASES
FILE REPERENCE: 031896-043000 (Am 101081)
CURRENT APPLICATION NUMBER: US/10/956,157
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ô
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Length 25;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Length 25;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 DB 1; L
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1.3e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Score 25; DB 1;
Pred. No. 1.3e+0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Query Match

0.5%; Score 25; UD

Best Local Similarity 100.0%; Pred. No. 1.3

Matches 25; Conservative 0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Query Match

0.5%; Score 25; DB
Best Local Similarity 100.0%; Pred. No. 1.3
Matches 25; Conservative 0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         4713 AGAGAACAGATTCATTTGCTTAATT 4737
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      4585 ACCACACAGGGCTTCATCGTAACTG 4609
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Sequence 147843, Application US/10956157
Publication No. US20050118625A1
GENERAL INFORMATION:
                          1 AGATGGTTGTAAGCTATTATAGTAT 25
                                                                                                                                                      ; Sequence 140192, Application US/10956157; Publication No. US20050118625A1; GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AGAGAACAGATICATITIGCITIAATI 25
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1 ACCACACAGGGCTTCATCGTAACTG 25
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TYPE: DNA
ORGANISM: Probe Sequence
US-10-956-157-144934
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ORGANISM: Probe Sequence
                                                                                                                              US-10-956-157-140192
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     US-10-956-157-140192
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            US-10-956-157-147843
                                                                                                                                                                                                                                APPLICANT: Wyeth
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             RESULT 66
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ద
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ద
```

ઠ

ઠે

g

```
Sequence 18376, Application US/10956157

Publication No. US20050118625A1

Publication No. US20050118625A1

GENERAL INFORMATION:
APPLICANT: Wyeth

APPLICANT: Wounts, William
TITLE OF INVENTION: HUMAN OSTEOARTHRITIS AND HUMAN PROTEASES

TITLE OF INVENTION: HUMAN OSTEOARTHRITIS AND HUMAN PROTEASES

TITLE OF INVENTION: HUMAN OSTEOARTHRITIS AND HUMAN PROTEASES

CURRENT APPLICATION NUMBER: US/10/956,157

CURRENT FILING DATE: 2004-10-04

NUMBER OF SEQ ID NOS: 319805

SOFTWARE: PatentIn version 3.2

LENGTH: 25
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Sequence 164911, Application US/10956157

Sequence 164911, Application No. US20050118625A1

GENERAL INFORMATION:

GENERAL INFORMATION:

APPLICANT: Wheth

APPLICANT: Wheth

TITLE OF INVENTION: NUCLEIC ACID ARRAYS FOR DETECTING GENE EXPRESSION ASSOCIATED WITH.

TITLE OF INVENTION: NUCLEIC ACID ARRAYS FOR DETECTING GENE EXPRESSION ASSOCIATED WITH.

TITLE OF INVENTION: NUCLEIC ACID ARRAYS FOR DETECTING GENE EXPRESSION ASSOCIATED WITH.

TITLE OF INVENTION: NUCLEIC ACID ARRAYS FOR DETECTING GENE EXPRESSION ASSOCIATED WITH.

TITLE OF INVENTION: NUMBER: US/10/956,157

CURRENT APPLICATION NUMBER: US/10/956,157

CURRENT FILING DATE: 2004-10-04

NUMBER OF SEQ ID NOS: 319805

SOFTWARE: Patentin version 3.2

SEQUENCE: ACID NO 164911
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ö
                                                                                                                                                                                                                                       ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Gaps
                                                                                                                                                                                                                                       Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            .
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ö
                                                                                                                                                                                                                                       ;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Length 25;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Length 25;
                                                                                                                                                                                          Length 25;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Indels
                                                                                                                                                                                                                                       0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1.3e+02;
hes 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                0.5%; Score 25; DB 1; Le
100.0%; Pred. No. 1.3e+02;
ative 0; Mismatches 0;
                                                                                                                                                                                             DB 1; Le
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 0.5%; Score 25; DB 1;
                                                                                                                                                                                  0.5%; buc_
100.0%; Pred. No. ...
0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   100.0%; Prec. ...
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               4702 AAGGCATTTCTAGAGAACAGATTCA 4726
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           4503 AAGTGATGACACCCTCGAAGGGGC 4527
                                                                                                                                                                                                                                                                                            4819
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1 AAGGCATTTCTAGAGAACAGATTCA 25
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1 AAGTGATGACACCCTCGAAGGGGC 25
                                                                                                                                                                                                                                                                                                                                       1 AArcerraacarcracracracras
                                                                                                                                                                                                                                                                                            4795 AATGGTTAAGATGTACTTGACTAGT
NUMBER OF SEQ ID NOS: 319805
SOFTWARE: PatentIn version 3.2
SEQ ID NO 163394
LENGTH: 25
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Query Match 0.5%
Best Local Similarity 100.0
Matches 25; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    25; Conservative
                                                                                                                                                                                                                   Best Local Similarity 100.
Matches 25, Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TYPE: DNA
ORGANISM: Probe Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TYPE: DNA
CRCANISM: Probe Sequence
US-10-956-157-163576
                                                                                                       TYPE: DNA
CORGANISM: Probe Sequence
US-10-956-157-163394
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Query Match
Best Local Similarity
Matches 25; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    US-10-956-157-164911
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      RESULT 73
US-10-956-157-164911
                                                                                                                                                                                                                                                                                                                                                                                                                        RESULT 72
US-10-956-157-163576
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     LENGTH: 25
                                                                                                                                                                                                       Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                q
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ð
                                                                                                                                                                                                                                                                                                    ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   APPLICANT: Wyeth
APPLICANT: Wouth,
APPLICANT: Wounts, William
APPLICANT: Wounts, William
TITLE OF INVENTION: NUCLEIC ACID ARRAYS FOR DETECTING GENE EXPRESSION ASSOCIATED WITH
TITLE OF INVENTION: HUMAN OSTEOARTHRITIS AND HUMAN PROTEASES
FILE REFERENCE: 031896-043000 (AM 101081)
CURRENT APPLICATION NUMBER: US/10/956,157
CURRENT APPLICATION UNDER: 0204-10-04
                                                                                                                                                                                                                             TITLE OF INVENTION: NUCLBIC ACID ARRAYS FOR DETECTING GENE EXPRESSION ASSOCIATED WITH TITLE OF INVENTION: NUCLBIC ACID ARRAYS FOR DETECTING GENE EXPRESSION ASSOCIATED WITH TITLE OF INVENTION: UNCLBIC ACID AND 101081)
CURRENT APPLICATION NUMBER: US/10/956,157
CURRENT APPLICATION NUMBER: US/10/956,157
NUMBER OF SEQ ID NOS: 319805
SOFTWARE: Patentin version 3.2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               APPLICANT: Wyeth
APPLICANT: Wyeth
APPLICANT: Wyeth
APPLICANT: Wounts, William
APPLICANT: Wounts, William
TITLE OF INVENTION: NUCLEIC ACID ARRAYS FOR DETECTING GENE EXPRESSION ASSOCIATED WITH
TITLE OF INVENTION: HUMAN OSTEOARTHRITIS AND HUMAN PROTEASES
FILE REFERENCE: 031896-043000 (AM 101081)
CURRENT APPLICATION NUMBER: 105/10/956,157
CURRENT FILING DATE: 2004-10-04
NUMBER OF SEQ ID NOS: 319805
SOFTWARE: Patentin version 3.2
SOFTWARE: Patentin version 3.2
LENGTH: 25
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Length 25;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     0.5%; Score 25; DB 1; Length 25; 100.0%; Pred. No. 1.3e+02; cive 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              DB 1; Le
1.3e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Query Match 0.5%; Score 25; DB Best Local Similarity 100.0%; Pred. No. 1.3 Matches 25; Conservative 0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           4605 AACTGCTTCTAGAGATGGGATTGTG 4629
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       4590 ACAGGGCTTCATCGTAACTGCTTCT 4614
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Sequence 163394, Application US/10956157 Publication No. US20050118625A1 GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1 AACTGCTTCTAGAGATGGGATTGTG 25
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ; Sequence 160340, Application US/10956157; Publication No. US20050118625A1; GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Acadederrearceraacreerrer 25
                                                                                                                                     ; Sequence 151977, Application US/10956157; Publication No. US20050118625A1; GENERAL INFORMATION: APPLICANT: Wyeth
                    1 ACTGACTGACTAAATGACACCCAAA 25
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Best Local Similarity 100.
Matches 25; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TYPE: DNA
CRGANISM: Probe Sequence
US-10-956-157-160340
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TYPE: DNA
ORGANISM: Probe Sequence
US-10-956-157-151977
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             US-10-956-157-163394
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          US-10-956-157-160340
                                                                                                                      US-10-956-157-151977
                                                                                                                                                                                                                                                                                                                                                                                                                                  SEQ ID NO 151977
LENGTH: 25
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              RESULT 70
```

ઠ g ò

```
APPLICANT: Wyeth
APPLICANT: Would: William
APPLICANT: Would: William
TITLE OF INVENTION: NUCLEIC ACID ARRAYS FOR DETECTING GENE EXPRESSION ASSOCIATED WITH
TITLE OF INVENTION: HUMAN OSTEOARTHRITIS AND HUMAN PROTEASES
FILE REFERENCE: 031895-043000 (AM 101081)
CURRENT APPLICATION NUMBER: US/10/956,157
CURRENT FILING DATE: 2004-110-04
NUMBER OF SEQ ID NOS: 319805
SOFTWARES PatentIn version 3.2
SEQ ID NO 162818
LENGTH: 25
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Sequence 18354, Application US/10956157
Publication No. US20050118625A1
Publication No. US20050118625A1
Publication No. US20050118625A1
APPLICANT: Wyeth
APPLICANT: Wounts, William
APPLICANTION: HUMAN OSTEOARTHRITIS AND HUMAN PROTEASES
FILE REFERENCE: 031896-043000 (AM 101081)
CURRENT APPLICANTION NUMBER: US/10/956,157
CURRENT FILING DATE: 2004-10-04
NUMBER OF SEQ ID NOS: 319805
                                                                                                                                                                                                                      Gapa
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Gaps
                                                                                                                                                                                                                      ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ö
                                                                                                                                                                         Length 25;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Length 25;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Length 25;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   DB 1; Le...
                                                                                                                                                                      DB 1; Le
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Score 25; DB 1; Le
Pred. No. 1.3e+02;
0; Mismatches 0;
                                                                                                                                                                      Query Match

0.5%; Score 25; DB
Best Local Similarity 100.0%; Pred. No. 1.3
Matches 25; Conservative 0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Query Match 0.5%; Score 25; DB Best Local Similarity 100.0%; Pred. No. 1.3 Matches 25; Conservative 0; Mismatches
                                                                                                                                                                                                                                                                         4552 CATGACATCACCACTGATGTCGCCA 4576
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       4834 CTTTGCAAGAATCAGCCAGCCAACA 4858
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      4815 CTAGTTTACTTATGCATCTCTTTGC 4839
                                                                                                                                                                                                                                                                                                                    1 cargacarcarcacrearerececa 25
                                                                                                                                                                                                                                                                                                                                                                                                                                        Sequence 182818, Application US/10956157
Publication No. US20050118625A1
GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1 cragirracirardcarcicrride 25
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1 crtriccaagaarcagccagccaaca 25
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Query Match

Best Local Similarity 100.0%; P

Matches 25; Conservative 0;
SOFTWARE: Patentin version 3.2 -SEQ ID NO 178113 LENGTH: 25 TYPE: DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           SOFTWARE: Patentin version 3.2
SEQ ID NO 183524
LENGTH: 25
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              , ORGANISM: Probe Sequence
US-10-956-157-182818
                                                                                                  Sequence
                                                                                               ORGANISM: Probe US-10-956-157-178113
                                                                                                                                                                                                                                                                                                                                                                                                                      JS-10-956-157-182818
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    US-10-956-157-183524
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  US-10-956-157-183524
                                                                                                                                                                                                                                                                         ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ò
                                                          :...c.LCANT: Mounts, William

TITLE OF INVENTION: NUCLEIC ACID ARRAYS FOR DETECTING GENE EXPRESSION ASSOCIATED WITH

TITLE OF INVENTION: HUMAN OSTEOARTHRITS AND HUMAN PROTEASES

FILE REPERENCE: 031896-043000 (AM 101081)

CURRENT PAPLICATION NUMBER: US/10/956,157

CURRENT FILING DATE: 2004-10-04

NUMBER OF SEQ ID NOS: 319805

SOFTWARE: Patentin version 3.2

SEQ ID NO 165780

LENGTH: 25

TYPE: NOTE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       APPLICANT: Mounts, William
TITLE OF INVENTION: WOCKEIC ACID ARRAYS FOR DETECTING GENE EXPRESSION ASSOCIATED WITH
TITLE OF INVENTION: HUMAN OSTECARTHRITIS AND HUMAN PROTEASES
FILE REFERENCE: 031896-043000 (AM 101081)
CURRENT APPLICATION WUMBER: US/10/956,157
CURRENT FILING DATE: 2004-10-04
NUMBER OF SEQ ID NOS: 319805
SOFTWARE: Patentin version 3.2
SEQ ID NO 171456
LENGTH: 25
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            APPLICANT: Wyeth
APPLICANT: Wyeth
APPLICANT: Wyeth
APPLICANT: Wounts, William
APPLICANT: Mounts, William
TITLE OF INVENTION: NUCLEIC ACID ARRAYS FOR DETECTING GENE EXPRESSION ASSOCIATED WITH
TITLE OF INVENTION: HUMAN OSTEOARTHRITIS AND HUMAN PROTEASES
FILE REFERENCE: 031896-043000 (AM 101081)
CURRENT APPLICATION NUMBER: US/10/956,157
CURRENT FILING DATE: 2004-10-04
NUMBER OF SEQ ID NOS: 319805
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Length 25;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Length 25;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          DB 1; Le
. 1.3e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         DB 1; Le
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         0.5%; Scc...
100.0%; Pred. No. ...
0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Query Match 0.5%; Score 25; DB Best Local Similarity 100.0%; Pred. No. 1.3 Matches 25; Conservative 0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        4999 AATGCTATTCAAAGCAGTTAAACTG 5023
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       4587 CACACAGGGCTTCATCGTAACTGCT 4611
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1 AATGCTATTCAAAGCAGTTAAACTG 25
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ; Sequence 171456, Application US/10956157; Publication No. US20050118625A1; GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               US-10-956-157-178113; Application US/10956157; Publication No. US20050118625A1; GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1 cacacadederricardaracter 25
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Query Match
Best Local Similarity 100.0
Matches 25; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                        ; TYPE: DNA; ORGANISM: Probe Sequence
US-10-956-157-165780
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ORGANISM: Probe Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            RESULT 75
US-10-956-157-171456
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         US-10-956-157-171456
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    셤
```

셤 ò

ö

```
US-10-956-157-212854
US-10-956-157-212854

Sequence 212854, Application US/10956157

Sequence 212854, Application No. US20050118625A1

GENERAL INFORMATION:
APPLICANT: Wounts, William
TITLE OF INVENTION: HUMAN OSTEOARTHRITIS AND HUMAN PROTEASES
TITLE OF INVENTION: 0.0319805

FILE REPERENCE: 0319805

CURRENT FILING DATE: 2004-10-04

NUMBER OF SEQ ID NOS: 319805

SEQ ID NO 212854

LENGTH: 25
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          DEMERAL IN COMMIT.

DEMERAL IN COMMIT.

APPLICANT: Wyeth
APPLICANT: Wouth,
MILLiam
APPLICANT: Mounts, William
APPLICANT: Mounts, William
APPLICANT: Mounts, William
TITLE OF INVENTION: NUCLEIC ACID ARRAYS FOR DETECTING GENE EXPRESSION ASSOCIATED WITH
TITLE OF INVENTION: HUMAN OSTEOARTHRITIS AND HUMAN PROTEASES
FILE REFERENCE: 031896-043000 (AM 101081)
CURRENT APPLICATION NUMBER: US/10/956,157
CURRENT FILING DATE: 2004-10-04
NUMBER OF SEQ ID NOS: 319805
SOFTWARE: PatentIn version 3.2
SEQ ID NO 228189
LENGTH: 25
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ö
                                                                                                                                                                                      ô
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ö
                                                                                                                                                                                         ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Score 25; DB 1; Lengtn 2., Pred. No. 1.38+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   0.5%; Score 25; DB 1; Length 25;
100.0%; Pred. No. 1.3e+02;
                                                                                                                                       DB 1; Length 25;
1.3e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            0.5%; Score 25; DB ilarity 100.0%; Pred. No. 1.3 Conservative 0; Mismatches
                                                                                                                                       Query Match 0.5%; Score 25; DB Best Local Similarity 100.0%; Pred. No. 1.3 Matches 25; Conservative 0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      4828 GCATCTTTGCAAGAATCAGCCAG 4852
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          4813 GACTAGTTTACTTATGCATCTTTT 4837
                                                                                                                                                                                                                                        4595 GCTTCATCGTAACTGCTTCTAGAGA 4619
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1 GACTAGITTACTIAIGCAICTCITT 25
                                                                                                                                                                                                                                                                                    1 GCTTCATCGTAACTGCTTCTAGAGA 25
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sequence 228189, Application US/10956157
Publication No. US20050118625A1
GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Query Match
Best Local Similarity 100.0%;
Marches 25; Conservative 0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            , ORGANISM: Probe Sequence US-10-956-157-228189
                                              TYPE: DNA
; ORGANISM: Probe Sequence
US-10-956-157-212316
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ; ORGANISM: Probe Sequence
US-10-956-157-212854
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           US-10-956-157-228189
SEQ ID NO 212316
LENGTH: 25
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TYPE: DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             임
                                                                                                                                                                                                                                             ò
                                                                                                                                                                                                                                                                                    요
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Sequence 212316, Application US/10956157

Publication No. US20050118625A1

GENERAL INFORMATION:

APPLICANT: Wyeth

APPLICANT: Mounts, William

ITILE OF INVENTION: HUMAN OSTEOARTHRITIS AND HUMAN PROTEASES

FILE REFERENCE: 031896-043000 (AM 101081)

CURRENT APPLICATION NUMBER: US/10/956,157

CURRENT APPLICATION UNMER: 2004-10-04

NUMBER OF SEQ ID NOS: 319805
                                                           Sequence 189683, Application US/10956157
Publication No. US20050118625A1
GENERAL INFORMATION:
APPLICANT: Weath
APPLICANT: Weath
APPLICANT: Weath
TITLE OF INVENTION: HUMAN OSTEOARTHRITIS AND HUMAN PROTEASES
TITLE OF INVENTION NUMBER: US/10/956,157
CURRENT FILING DATE: 2004-10-04
NUMBER OF SEQ ID NOS: 319805
SEQ ID NO 189683
LENGTH: 25
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     APPLICANT: Wyeth APPLICANT: Wyeth APPLICANT: Wyeth APPLICANT: Wyeth APPLICANT: Wounts, William APPLICANT: Wounts, William TITLE OF INVENTION: NUCLEIC ACID ARRAYS FOR DETECTING GENE EXPRESSION ASSOCIATED WITH TITLE OF INVENTION: HUMAN OSTECARTHRITIS AND HUMAN PROTEASES FILE REFERENCE: 031896-043000 (AM 101081)
CURRENT APPLICATION NUMBER: 120/4-10-04
NUMBER OF SEQ ID NOS: 319805
SOFTWARE: Patentin version 3.2
SEQ ID NO 196619
LENGTH: 25
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ch 0.5%; Score 25; DB 1; Length 25; 1. Similarity 100.0%; Pred. No. 1.3e+02; 25; Conservative 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               0.5%; Score 25; DB 1; Length 25; 100.0%; Pred. No. 1.3e+02; ive 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                4541 CCGTGGGACATCATGACATCATCAC 4565
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    4863 CTGGGATTTTTATTGTATATGTTAT 4887
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Sequence 196619, Application US/10956157 Publication No. US20050118625A1 GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1 CCGTGGGACATCATGACATCATCAC 25
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1 Crecentritarierararerar 25
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             SOFTWARE: PatentIn version 3.2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Best Local Similarity 100.
Matches 25; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                TYPE: DNA
ORGANISM: Probe Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TYPE: DNA
ORGANISM: Probe Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  RESULT 81
US-10-956-157-212316
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     US-10-956-157-196619
                                                                                                                                                                                                                                                                                                                                                                                                                                                            US-10-956-157-189683
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    US-10-956-157-196619
                                                      US-10-956-157-189683
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Query Match
Best Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              RESULT 80
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ઠ
```

```
APPLICANT: Wyeth

APPLICANT: Wyeth

APPLICANT: Woults, William

TITLE OF INVENTION: NUCLEIC ACID ARRAYS FOR DETECTING GENE EXPRESSION ASSOCIATED WITH

TITLE OF INVENTION: HUMAN OSTEOARTHRITIS AND HUMAN PROTEASES

FILE REFERENCE: 031895-043000 (AM 101081)

CURRENT APPLICATION NUMBER: US/10/956.157

CURRENT FILING DATE: 2004-110-04

NUMBER OF SEQ ID NOS: 319805

SOFTWARES PATENTIN VERSION 3.2

SEQ ID NO 252174

LENGTH: 25
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   RESULT 88
US-10-956-157-259129
Squarec 259129, Application US/10956157
Squarec 259129, Application US/10956157
Squarec 259129, Application No. US20050118625A1
GGENERAL INFORMATION:
APPLICANT: Wounts, William
APPLICANT: Wounts, William
TITLE OF INVENTION: HUMAN OSTEOARTHRITIS AND HUMAN PROTEASES
TITLE OF INVENTION: HUMAN OSTEOARTHRITIS AND HUMAN PROTEASES
TITLE OF INVENTION: HUMAN OSTEOARTHRITIS AND HUMAN PROTEASES
CURRENT APPLICATION NUMBER: US/10/956,157
CURRENT APPLICATION NUMBER: US/10/956,157
CURRENT FILING DATE: 2004-10-04
NUMBER OF SEQ ID NOS: 319805
SOFTWARE: PatentIn version 3.2
SEQ ID NO 259129
LENGTH: 25
                                                                                                                                                                ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Gapa
                                                                                                                                                                ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ö
                                                                                                               Length 25;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   0.5%; Score 25; DB 1; Length 25; 100.0%; Pred. No. 1.3e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Length 25,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   DB 1; Le
1.3e+02;
                                                                                                             Query Match

0.5%; Score 25; DB
Best Local Similarity 100.0%; Pred. No. 1.3
Matches 25; Conservative 0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 0.5%; Score 25; DB 100.0%; Pred. No. 1.3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               100.0%; Prea. ...
                                                                                                                                                                                                       4495 GTAGGACCAAGTGATGACACCCCTC 4519
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           4749 GICTCCATATTACTGTTTCATGACT 4773
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            4545 GGGACATCATGACATCATCACTGAT 4569
                                                                                                                                                                                                                                                                                                                                                                  Sequence 252174, Application US/10956157
Publication No. US20050118625A1
GENERAL INFORMATION:
                                                                                                                                                                                                                                                     1 Graddaccaagrdardacacccrc 25
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1 Grerechariacierricardaer 25
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     GGGACATCATGACATCATCACTGAT 25
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Query Match
Best Local Similarity 100.
Matches 25; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 25; Conservative
                TYPE: DNA
ORGANISM: Probe Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ; ORGANISM: Probe Sequence
US-10-956-157-252174
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TYPE: DNA
ORGANISM: Probe Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Best Local Similarity
Matches 25; Conserv
                                                                 US-10-956-157-247128
                                                                                                                                                                                                                                                                                                                                                   US-10-956-157-252174
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       US-10-956-157-259129
LENGTH: 25
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 RESULT 89
                                                                                                                                                                                                                                                     셤
                                                                                                                                                                                                         ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ઠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TITLE OF INVENTION: MUCLEIC ACID ARRAYS FOR DETECTING GENE EXPRESSION ASSOCIATED WITH TITLE OF INVENTION: HUMAN OSTEOARTHRITIS AND HUMAN PROTEASES
FILE REPERRECE: 031896-043000 (AM 101081)
CURRENT APPLICATION NUMBER: US/10/956,157
CURRENT FILING DATE: 2004-10-04
NUMBER OF SEG ID NOS: 319805
SOFTWARE: PAECELIN Version 3.2
REQ ID NO 245906
LENGTH: 25
TYPE: ...
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    RESULT 86
US-10-956-157-247128
Sequence 247128, Application US/10956157
Fublication No. US20050118625A1
GENERAL INFORMATION:
APPLICANT: Wyeth
APPLICANT: Wyeth
TITLE OF INVENTION: NUCLEIC ACID ARRAYS FOR DETECTING GENE EXPRESSION ASSOCIATED WITH
FILE REFERENCE: 031896-043000 (AM 101081)
CURRENT APPLICATION NUMBER: US/10/956,157
CURRENT PLING DATE: 2004-10-04
NUMBER OF SEQ ID NOS: 319805
SOFTWARE: Patentin version 3.2
SEQ ID NO 247128
                             Sequence 23741, Application US/10956157

Publication No. US20050118625A1

GENERAL INFORMATION:
APPLICANT: Wyeth
APPLICANT: Wyeth
TITLE OF INVENTION: HUMAN OSTEOARTHRITIS AND HUMAN PROTEASES
FILE REPERENCE: 031896-043000 (Am 101081)
CURRENT APPLICATION NUMBER: US/10/956,157
CURRENT PILING DATE: 2004-10-04
NUMBER OF SEQ ID NOS: 319805
NUMBER OF SEQ ID NOS: 319805
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                              0.5%; Score 25; DB 1; Length 25; 100.0%; Pred. No. 1.3e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  0.5%; Score 25; DB 1; Length 25; llarity 100.0%; Pred. No. 1.3e+02; Conservative 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          4804 GATGTACTTGACTAGTTTACTTATG 4828
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               4818 GTTTACTTATGCATCTCTTTGCAAG 4842
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Best Local Similarity 100.
Matches 25; Conservative
                                                                                                                                                                                                                                                                                                                                                                                        ; ORGANISM: Probe Sequence
US-10-956-157-237441
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ; ORGANISM: Probe Sequence US-10-956-157-245906
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Query Match
Best Local Similarity
Matches 25; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          RESULT 85
US-10-956-157-245906
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   g
```

```
US-10-956-157-276167

US-10-956-157-276167

Sequence 276677, Application US/10956157

Sequence 276677, Application US/10956157

Sequence 276677, Application US/10956157

Sequence 2761677

Publication No. US20050118625A1

GENERAL INFORMATION:

APPLICANT: Wounts, William

APPLICANT: Wounts, William

TITLE OF INVENTION: HUMAN OSTEOARTHRITIS AND HUMAN PROTEASES

TITLE OF INVENTION: HUMAN OSTEOARTHRITIS AND HUMAN PROTEASES

TITLE OF INVENTION: 0AM 101081)

CURRENT APPLICATION NUMBER: US/10/956,157

CURRENT APPLICATION NUMBER: US/10/956,157

CURRENT PILING DATE: 2004-10-04

NUMBER OF SEQ ID NOS: 319805

SEQ ID NO 276167

LENGTH: 25
                                                                                                                                                                                                                                                                                                                                                                                                                                        APPLICATION MOUNTED, William TITLE OF INVENTION: MOUNTED, WITH TITLE OF INVENTION: MUCLEIC ACID ARRAYS FOR DETECTING GENE EXPRESSION ASSOCIATED WITH TITLE OF INVENTION: HUMAN OSTEOARTHRITIS AND HUMAN PROTEASES
FILE REFERENCE: 031896-043000 (AM 101081)
CURRENT APPLICATION NUMBER: US/10/956,157
CURRENT FILING DATE: 2004-10-04
NUMBER OF SEQ ID NOS: 319805
SEQ ID NO 273285
LENGTH: 25
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ö
                                                                                                                                 ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Gaps
                                                                                                                                      Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ö
                                                                                                                                      ;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   0.5%; Score 25; DB 1; Length 25; 100.0%; Pred. No. 1.3e+02; tive 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             0.5%; Score 25; DB 1; Length 25; 100.0%; Pred. No. 1.3e+02;
                                                                                      Length 25;
                                                                                                                                      0; Indels
                                                                                      Query Match 0.5%; Score 25; DB 1; L
Best Local Similarity 100.0%; Pred. No. 1.3e+02;
Matches 25; Conservative 0; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Query Match 0.5%; Score 25; DB
Best Local Similarity 100.0%; Pred. No. 1.3
Matches 25; Conservative 0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       4506 TGATGACACCCTCGAAGGGGCCCA 4530
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                4594 GGCTTCATCGTAACTGCTTCTAGAG 4618
                                                                                                                                                                                         4456 GGCACTGAAGTTGTCCAGGAAATTC 4480
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       25
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                25
                                                                                                                                                                                                                                                                                                                                                         Sequence 272285, Application US/10956157
Publication No. US20050118625A1
GENERAL INFORMATION:
APPLICANT: Wyeth
                                                                                                                                                                                                                               1 GGCACTGAAGTTGTCCAGGAAATTC 25
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     GCTTCATCGTAACTGCTTCTAGAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ; ORGANISM: Probe Sequence US-10-956-157-276167
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                GRGANISM: Probe Sequence US-10-956-157-273285
; TYPE: DNA
; ORGANISM: Probe Sequence
US-10-956-157-272237
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Query Match
Best Local Similarity
Matches 25; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   RESULT 94
US-10-956-157-294257
                                                                                                                                                                                                                                                                                                                   RESULT 92
US-10-956-157-273285
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TYPE: DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TYPE: DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         d
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   원
                                                                                                                                                                                                                                            d
                                                                                                                                                                                                 ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Sequence 272237, Application US/10956157

Publication No. US20050118625A1

GENERAL INFORMATION:
APPLICANT: Wyeth
APPLICANT: Mounts, William
TITLE OF INVENTION: HUMAN OSTEDARTHRITIS AND HUMAN PROTEASES
FILE REPRENCE: 031895-04300 (AM 101081)
CURRENT APPLICATION NUMBER: US/10/956,157

CURRENT FILING DATE: 2004-10-04
NUMBER OF SEQ ID NOS: 319805
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            RESULT 90
US-10-956-157-270613
US-10-956-157-270613
US-10-956-157-270613
US-10-956-157-270613
SQUENCE 270613, Application US/10956157
Publication No. US20050118625A1
GENERAL INFORMATION:
GENERAL INFORMATION:
TITLE OF INVENTION: UNCLEIC ACID ARRAYS FOR DETECTING GENE EXPRESSION ASSOCIATED WITH
TITLE OF INVENTION: HUMAN OSTBOARTHRITIS AND HUMAN PROTEASES
FILE REFERENCE: 031896-043000 (AM 101081)
CURRENT APPLICATION UNDERS: US/10/956,157
CURRENT FILING DATE: 2004-10-04
NUMBER OF SEQ ID NOS: 319805
SOFTWARE: Patentin version 3.2
SEQ ID NO 270613
LENGTH: 25
                                                                                                                       TITLE OF INVENTION: NUCLBIC ACID ARRAYS FOR DETECTING GENE EXPRESSION ASSOCIATED WITH TITLE OF INVENTION: NUCLBIC ACID ARRAYS FOR DETECTING GENE EXPRESSION ASSOCIATED WITH TITLE OF INVENTION: UNCLBIC ACID ACIDOATH 101081)
CURRENT APPLICATION NUMBER: US/10/956,157
CURRENT PILING DATE: 2004-10-04
NUMBER OF SEQ ID NOS: 319805
SOFTWARE: PATENTIN VERSION 3.2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              .;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Length 25;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Length 25;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Query Match 0.5%; Score 25; DB 1; La
Best Local Similarity 100.0%; Pred. No. 1.3e+02;
Matches 25; Conservative 0; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Score 25; DB 1; Lo
Pred. No. 1.3e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Query Match 0.5%; Score 25; DB Best Local Similarity 100.0%; Pred. No. 1.3 Matches 25; Conservative 0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                4442 GGAAAATAATTGAAGGCACTGAAGT 4466
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          4637 GGAAATAAAACCTACTGATTTGTAT 4661
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1 ggaaatraarrgaaggcacrgaagr 25
       US-10-956-157-269842
; Sequence 269842, Application US/10956157
; Publication No. US20050118625A1
; GENERAL INFORMATION :
; APPLICANT: Wyeth
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1 GGAAATAAAACCTACTGATTTGTAT 25
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      SOFTWARE: PatentIn version 3.2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TYPE: DNA
CORGANISM: Probe Sequence
US-10-956-157-270613
                                                                                                                                                                                                                                                                                                                                                                                     TYPE: DNA
ORGANISM: Probe Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             RESULT 91
US-10-956-157-272237
                                                                                                                                                                                                                                                                                                                                                                                                                                US-10-956-157-269842
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                SEQ ID NO 272237
LENGTH: 25
                                                                                                                                                                                                                                                                                                                                  SEQ ID NO 269842
LENGTH: 25
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ठ
```

```
Sequence 3.40-4/C

Sequence 4. Application US/10958348

Sequence 1. Application US/10958348

Sequence 1. Application US/10958348

GENERAL INFORMATION:
APPLICANT: Okamoto, Tadashi
APPLICANT: Cameyama, Makoto
TITLE OF INVENTION: Probe Carrier, Probe Fixing Carrier and Method of Manufacturing th
FILE REFERENCE: 03500.016311.1

CURRENT APPLICATION NUMBER: US/10/958,348

CURRENT APPLICATION NUMBER: US 10/133,675

PRIOR APPLICATION NUMBER: US 2001-133698

PRIOR FILING DATE: 2001-04-27

PRIOR PILING DATE: 2001-04-27

PRIOR FILING DATE: 2001-04-27

PRIOR FILING DATE: 2001-04-27

PRIOR PILING DATE: 2001-04-27

NUMBER OF SEQ ID NOS: 4

SOFTWARE: PatentIn version 3.1

SEQ ID NO 4
                                                                                                                                                                                                                                                                                                                                                          ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ö
                                                                                                                                                                                       FEATURE:
, OTHER INFORMATION: Target sequence to be hybridized with a probe sequence
US-10-958-348-3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  OTHER INFORMATION: Probe sequence to by hybridized with a target sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Gaps
                                                                                                                                                                                                                                                                                                                                                          Gapa
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ö
                                                                                                                                                                                                                                                                                                Query Match 0.5%; Score 25; DB 1; Length 25; Best Local Similarity 100.0%; Pred. No. 1.38+02; Matches 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               0.5%; Score 25; DB 1; Length 25;
100.0%; Pred. No. 1.30+02;
tive 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         APPLICANT: Hammond, Angela K.
TITLE OF INVENTION: NOVEL CYTOKINE ZALPHA11 LIGAND
                                                                                                                                                                                                                                                                                                                                                                                                         5025 AAAAAAAAAAAAAAAAAAAAA 5049
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            5025 AAAAAAAAAAAAAAAAAAAAA 5049
                                                                                                                                                                                                                                                                                                                                                                                                                                                              1 AAAAAAAAAAAAAAAAAAAAA 25
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                25 ААААААААААААААААААААААА 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Sequence 39, Application US/1078742
Publication No. US20040260055A1
GENERAL INFORMATION:
APPLICANT: Presnell, Scott R.
APPLICANT: Presnell, Scott R.
APPLICANT: Foretr. Donald C.
APPLICANT: Foster. Donald C.
APPLICANT: Gross, Jane A.
APPLICANT: Gross, Jane A.
APPLICANT: Ushnston, Jane V.
APPLICANT: Ushnston, Jane V.
APPLICANT: Ushnston, Andrew J.
APPLICANT: Nolson, Andrew J.
  PRIOR FILING DATE: 2001-04-27
. NUMBER OF SEQ ID NOS: 4
SOFTWARE: Patentin version 3.1
SEQ ID NO 3
LENGTH: 25
                                                                                                                                  TYPE: DNA ORGANISM: Artificial Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TYPE: DNA
ORGANISM: Artificial Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Best Local Similarity 100.0
Matches 25; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              RESULT 98
US-10-787-442-39/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       US-10-958-348-4/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             US-10-958-348-4
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                           셤
                                                                                                                                                                                                                                                                                                                                                                                                            ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ઠે
                                                                                                   APPLICANT: Mounts, William
TITLE OF INVENTION: NUCLEIC ACID ARRAYS FOR DETECTING GENE EXPRESSION ASSOCIATED WITH
TITLE OF INVENTION: NUCLEIC ACID ARRAYS FOR DETECTING GENE EXPRESSION ASSOCIATED WITH
FILE FOR INVENTION: NUMBER: US/10/956,157
CURRENT APPLICATION NUMBER: US/10/956,157
CURRENT FILING DATE: 2004-10-04
NUMBER OF SEQ ID NOS: 319805
SOFTWARE: Patentin version 3.2
SEQ ID NO 294257
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      APPLICANT: Mounte, William
TITLE OF INVENTION: WOUCLEIC ACID ARRAYS FOR DETECTING GENE EXPRESSION ASSOCIATED WITH
TITLE OF INVENTION: HUMAN OSTBOARTHRIIS AND HUMAN PROTEASES
FILE REFERENCE: 031896-043000 (AM 101081)
CURRENT APPLICATION NUMBER: US,10/956,157
CURRENT FILING DATE: 2004-10-04
NUMBER OF SEQ ID NOS: 319805
SOFTWARE: Patentin version 3.2
SEQ ID NO 336258
LENGTH: 25
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            APPLICANT: Okamura, Nobuyuki
APPLICANT: Okamura, Nobuyuki
APPLICANT: Okamoto, Tadashi
APPLICANT: Okamoto, Tadashi
APPLICANT: Chameyama, Makoto,
TITLE OF INVENTION: Probe Carrier, Probe Fixing Carrier and Method of Manufacturing of FILE REFERENCE: 03500.016371.1
CURRENT APPLICATION NUMBER: US/10/958,348
CURRENT FILING DATE: 2004-10-06
PRIOR PILING DATE: 2002-04-29
PRIOR FILING DATE: 2001-04-27
PRIOR FILING DATE: 2001-04-27
PRIOR FILING DATE: 2001-04-27
PRIOR PLICATION NUMBER: UP 2001-133699
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Query Match 0.5%; Score 25; DB 1; Length 25; Best Local Similarity 100.0%; Pred. No. 1.3e+02; Matches 25; Conservative 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      0.5%; Score 25; DB 1; Length 25; 100.0%; Pred. No. 1.3e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    100.0%; Pred. ....
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                4746 TATGTCTCCATATTACTGTTTCATG 4770
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              4831 TCTCTTTGCAAGAATCAGCCAGCCA 4855
Sequence 294257, Application US/10956157
Publication No. US20050118625A1
GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1 rargrerecararracierricare 25
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1 rérefriécaagaaréagécagéca 25
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Sequence 306258, Application US/10956157; Publication No. US20050118625A1
GENERAL INFORMATION: APPLICANT: Wyeth
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Sequence 3, Application US/10958348
Publication No. US20050158738A1
GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           25; Conservative
                                                                                                                                                                                                                                                                                                                                                                              ; TYPE: DNA
; ORGANISM: Probe Sequence
US-10-956-157-294257
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         , ORGANISM: Probe Sequence US-10-956-157-306258
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                RESULT 95
US-10-956-157-306258
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               RESULT 96
US-10-958-348-3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ઠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ð
```

```
TELEX: «Unknown»
INFORMATION FOR SEQ ID NO: 10:
SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TYPE: DNA
ORGANISM: Artificial Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TYPE: DNA ORGANISM: Artificial
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   RESULT 101
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  à
                                                                                                                                                                                                                                                                                                                                                ð
                                                                                                                                                                                                                                                                                                                                                                                     qq
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              RESULT 99
US-10-925-448-10/c
; Sequence 10, Application US/10925448
; Publication No. US20050019820A1
; GENERAL INFORMATION:
; APPLICANT: BILLING-MEDEL, PATRICIA
APPLICANT: BILLING-MEDEL, PATRICIA
; REIEMAN, PAULA N.
FRIEDMAN, PAULA N.
RUASSIL, JOHN C.
; RUSSELL, JOHN C.
; STROUPE, STEPHEN D.
; TITLE OF INVENTION: REAGENTS AND METHODS USEFUL
; TITLE OF INVENTION: FOR DETECTING DISEASES OF THE LUNG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Query Match

0.5%; Score 25; DB 1; Length 26;
Best Local Similarity 100.0%; Pred. No. 1.30+02;
Matches 25; Conservative 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        COMPUTER READABLE FORM:

COMPUTER READABLE FORM:

COMPUTER: Diskette

COMPUTER: Diskette

COMPUTER: IBM COMPATIBLE

COMPATION SYSTEM: DOS

SOFTWARE: FastSEQ for Windows Version 2.0

CURRENT APPLICATION DATE:

APPLICATION NUMBER: US/10/925,448

FILING DATE: 25-ANG-2004

CLASSIFICATION: «Unknown»
                                                                                                                                                                                                                                                                                                                                                                                                                              ; OTHER INFORMATION: Oligonucleotide primer ZC7764b US-10-787-442-39
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               PRIOR APPLICATION DATA:

APPLICATION NUMBER: US/09/092,296
FILING DATE: 05-JUNE-1998
APPLICATION NUMBER: 60/048,810
FILING DATE: 05-JUN-1997
ATTORNEY/AGENT INFORMATION:

REGISTRATION NUMBER: 35,441
REFERENCE/DOCKET NUMBER: 6104.US.01
TELECOMMUNICATION INFORMATION:

TELECOMMUNICATION INFORMATION:
                                CURRENT PELLICATION NUMBER: US/10/787,442
CURRENT FILING DATE: 2004-02-26
PRIOR PEPLICATION NUMBER: US/09/522,217
PRIOR FILING DATE: 2000-03-09
PRIOR FILING DATE: 1999-03-09
PRIOR FILING DATE: 1999-03-09
PRIOR FILING DATE: 1999-03-11
PRIOR FILING DATE: 1999-03-11
PRIOR FILING DATE: 1999-07-01
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CORRESPONDENCE ADDRESS:
CORRESPONDENCE ADDRESSE:
ADDRESSEE: Abbott Laboratories
STREET: 100 Abbott Park Road
CITY: Abbott Park
STATE: 11
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     5025 AAAAAAAAAAAAAAAAAAAAAA 5049
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       25 ААААААААААААААААААААА
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TELEFAX: 847/938-2623
                                                                                                                                                                                                                                                                                                                                                                                   TYPE: DNA
ORGANISM: Artificial Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           COUNTRY: USA
                         FILE REFERENCE: 99-16
                                                                                                                                                                                                                                                                                                                                 SEQ ID NO 39
LENGTH: 26
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     g
```

```
FEATURE:
OTHER INFORMATION: DNA bases used to represent integers in DNA based number system
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ö
                                                                                                                                                                                                                                                       ö
                                                                                                                                                                                                                                                       Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Sequence 3, Application US/10849491
; Sequence 3, Application US/10849491
; Publication No. US2005055167A1
; GENERAL INFORMATION:
; APPLICANT: BHARADWAJ, LALIT M.
; APPLICANT: BHONDEKEN, AMOL P.
; APPLICANT: KUMAR, RAKESH P.
; APPLICANT: KUMAR, RAKESH P.
; APPLICANT: BAJPAI, RAM PRAKASH
; ITILE OF INVENTION: UNA BASED NUMBER SYSTEM AND ARTITHMETIC
; TILE REFERENCE: U 0152019
; CURRENT PELICATION NUMBER: US/10/849,491
; CURRENT PILIOR DAME: 2004-05-19
; NUMBER OF SEQ ID NOS: 5
; SEQ ID NO 3
; SEQ ID NO 3
; LENGTH: 32
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ö
                                                                                                                                                                                                                                                       ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Sequence 9, Application US/10942251
; Sequence 9, Application US/10942251
; Publication No. US20050069524A1
; GENERAL INFORMATION:
; APPLICANT: Romantchikov, Yuri
; TITLE OF INVENTION: IMPROVED METHODS FOR INSERTION OF
TITLE OF INVENTION: NUCLEIC ACIDS INTO CIRCULAR VECTORS; FILE REFERENCE: 11639/1
; CURRENT APPLICATION NUMBER: US/10/942,251
; CURRENT APPLICATION NUMBER: US/09/213,834
; PRIOR FILING DATE: 1998-12-17
; NUMBER OF SEQ ID NOS: 50
; SOFTHARE: PastSEQ for Windows Version 4.0
; SEQ ID NO 9
; LENGTH: 25
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Length 25;
                                                                                                                                                                                                      Length 26;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Query Match
0.5%; Score 24.6; DB 1;
Best Local Similarity 96.0%; Pred. No. 1.4e+02;
Matches 24; Conservative 1; Mismatches 0;
                                                                                                                                                                                                   Query Match
0.5%; Score 25; DB 1; L.
Best Local Similarity 100.0%; Pred. No. 1.3e+02;
Matches 25; Conservative 0; Mismatches 0;
LENGTH: 26 base pairs

| TYPE: nucleic acid
| STRANDEDNESS: single
| TOPOLOGY: linear
| SEQUENCE DESCRIPTION: SEQ ID NO: 10:
US-10-925-448-10
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       5041 AAAAAAAAAAAAAAAAAAAAAAA 5065
                                                                                                                                                                                                                                                                                                              5025 AAAAAAAAAAAAAAAAAAAAAA 5049
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                25 AAAAAAAAAAAAAAAAAAAAA 1
                                                                                                                                                                                                                                                                                                                                                                25 дададададададададададада 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               , OTHER INFORMATION: Cloning Vector US-10-942-251-9
```

```
APPLICANT: SCRIEGE. Wilson
APPLICANT: Bondege, Wilson
APPLICANT: Monahan, John
TITLE OF INVENTION: OVOUE GENES, COMPOSITIONS, KITS, AND METHODS FOR
TITLE OF INVENTION: NOVEL GENES, CANCER
TITLE OF INVENTION: HUMAN PROSTATE CANCER
TITLE OF INVENTION: HUMAN PROSTATE CANCER
TITLE OF INVENTION: HUMAN PROSTATE
CURRENT APPLICATION NUMBER: 09/785,276
PRIOR PELICATION NUMBER: 09/785,276
PRIOR PELICATION NUMBER: 60/183,319
PRIOR FILING DATE: 2000-02-17
PRIOR APPLICATION NUMBER: 60/183,319
PRIOR PILING DATE: 2000-03-16
PRIOR PELING DATE: 2000-03-16
PRIOR PELING DATE: 2000-05-25
PRIOR APPLICATION NUMBER: 60/210,34
PRIOR PILING DATE: 2000-06-25
PRIOR APPLICATION NUMBER: 60/210,34
PRIOR PILING DATE: 2000-06-29
PRIOR PILING DATE: 2000-06-29
PRIOR PILING DATE: 2000-06-29
PRIOR PILING DATE: 2000-07-18
PRIOR PILING DATE: 
                                                                                                                                                                                                                                                              Sequence 962, Application US/10831778
| Publication No. US20040235774A1
| GENERAL INFORMATION:
| APPLICANT: Brataler, Robert L. |
| APPLICANT: Petersen, Deanna M. |
| APPLICANT: Petersen, Deanna M. |
| APPLICANT: Pouron, Yve8 |
| TILLE OF INVENTION: Immunostimulatory Nucleic Acids for the TITLE OF INVENTION: Treatment of Asthma and Allergy |
| FILE REFERENCE: C1037/7013 (HCL/MAT) |
| CURRENT APPLICATION NUMBER: US/10/831,778 |
| PRIOR APPLICATION NUMBER: US/10/831,778 |
| PRIOR APPLICATION NUMBER: US/10/831,778 |
| PRIOR PILING DATE: 2000-02-03 |
| NUMBER OF SEQ ID NOS: 1093 |
| SEQ ID NO 962 |
| LENGTH: 24
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Length 24;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Query Match
0.5%; Score 24; DB 1; Le
Best Local Similarity 100.0%; Pred. No. 1.5e+02;
Matches 24; Conservative 0; Mismatches 0;
                                      5025 AAAAAAAAAAAAAAAAAAAA 5048
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        5025 AAAAAAAAAAAAAAAAAAAA 5048
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ; Sequence 14833, Application US/10357930 Publication No. US20040259086A1 GENERAL INFORMATION: APPLICANT: Schlegel. Robert
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          OTHER INFORMATION: Synthetic Sequence
                                                                                                      24 AAAAAAAAAAAAAAAAAAAAAA 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ORGANISM: Artificial Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              RESULT 105
US-10-357-930-14833/c
                                                                                                                                                                                                                                         US-10-831-778-962
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              US-10-831-778-962
                                      ò
                                                                                        g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    g
                                                                                                                                      ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Gарв
                                                                                                                                         Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ö
                                                                                                                                      .;
0
                                                                                                                                                                                                                                                                                                                                                                                                                          Sequence 433, Application US/10831778

Publication No. US20040235774A1

GENERAL INFORMATION:
APPLICANT: Bratzler. Robert L.
APPLICANT: Petersen. Deanna M.
APPLICANT: Petersen. Deanna M.
APPLICANT: Fetersen. Deanna M.
APPLICANT: Fetersen. Deanna M.
APPLICANT: Fetersen. Deanna M.
APPLICANT: Fetersen. Sedena M.
TITLE OF INVENTION: Treatment of Aethma and Allergy
TITLE OF INVENTION: Treatment of Aethma and Allergy
TITLE OF INVENTION: Treatment of Aethma and Allergy
CURRENT APPLICATION NUMBER: US/10/831,778

PRIOR APPLICATION NUMBER: US 60/179,991

PRIOR PILING DATE: 2000-02-03

NUMBER OF SEQ ID NOS: 1093

SEQ ID NO 433

LENGTH: 24
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   RESULT 103
US-10-831-778-961/C

Sequence 961, Application US/10831778

Sequence 961, Application US/10831778

Publication No. US20040235774A1

GENERAL INFORMATION:
APPLICANT: Bratzler, Robert L.
APPLICANT: Petersen. Deanna M.
APPLICANT: Petersen. Deanna M.
APPLICANT: Petersen. Yess

TITLE OF INVENTION: Immunostimulatory Nucleic Acids for the TITLE OF INVENTION: Treatment of Asthma and Allergy FILE REFERENCE: Clorally 17703 (HCL/MAT);
CURRENT APPLICATION NUMBER: US/10/831,778

CURRENT PILING DATE: 2000-02-03

FRIOR FILING DATE: 2000-02-03

NUMBER OF SEQ ID NOS: 1093

SOFTWARE: FastSEQ for Windows Version 3.0

LENGTH: 24
                                                               Query Match 0.5%; Score 24.6; DB 1; Length 32; Best Local Similarity 87.1%; Pred. No. 1.8e+02; Matches 27; Conservative 0; Mismatches 4; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Query Match 0.5%; Score 24; DB 1; Length 24; Best Local Similarity 100.0%; Pred. No. 1.5e+02; Matches 24; Conservative 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Length 24;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           0; Indels.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        DB 1; Le
                                                                                                                                                                                                      5024 TAAAAAAAAAAAAAAAAAAAAAAAAAA 5054
                                                                                                                                                                                                                                             1 TAAAAAAAAAAAAAAAAAAAAAAAA 31
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Query Match 0.5%; Score 24; DB Best Local Similarity 100.0%; Pred. No. 1.5 Matches 24; Conservative 0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           5025 AAAAAAAAAAAAAAAAAAAAA 5048
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              FEATURE:
CTHER INFORMATION: Synthetic Sequence
US-10-831-778-433
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ; OTHER INFORMATION: Synthetic Sequence US-10-831-778-961
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           24 AAAAAAAAAAAAAAAAAAAAA 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TYPE: DNA
ORGANISM: Artificial Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TYPE: DNA
ORGANISM: Artificial Sequence
                                                                                                                                                                                                                                                                                                                                                                     RESULT 102
US-10-831-778-433/c
US-10-849-491-3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Query Match
Best Local &
                                                                                                                                                                                                         ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ઠે
```

Gaps

.. 0

Thu Aug 18 08:58:56 2005

```
Sequence 5, Application US/10160786

Publication No. US20030225013A1

GENERAL INFORMATION:
GENERAL INFORMATION:
TAPLICANT: Subman M. Preier
APPLICANT: Stanach W. Dobie
TITLE OF INVENTION: ANTISENSE MODULATION OF PHOSPHOINOSITIDE-3-KINASE, REGULATORY SUBL.
TITLE OF INVENTION: P150 EXPRESSION
FILE REFERENCE: RTS-0376
CURRENT FILING DATE: 2002-05-31
NUMBER OF SEQ ID NOS: 147

SEQ ID NO S.
LENGTH: 23
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          APPLICANT: Susan M. Freier
APPLICANT: Kenneth W. Dobie
TITLE OF INVENTION: ANTISENSE MODULATION OF PHOSPHOINOSITIDE-3-KINASE, REGULATORY SUBITITLE OF INVENTION: P150 EXPRESSION
FILE REFERENCE: RTS-0376
CURRENT APPLICATION NUMBER: US/10/160,786
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ô
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ö
                                    RESULT 108
US-10-719-956-529365
is Sequence 529365, Application US/10719956
; Publication No. US20040146910A1
; GENERAL INFORMATION:
is APPLICANT: Xue Mei Zhou
is TITLE OF INVENTION: Methods of Genetic Analysis of Rat
if TITLE OF INVENTION: Methods of Genetic Analysis of Rat
if CURRENT APPLICATION NUMBER: US/10/719,956
if CURRENT FILING DATE: 2003-11-20
if PRIOR FILING DATE: 2002 11 20
if RAPLICATION NUMBER: 604427,836
if RAPLICATION NUMBER: 604427,836
if SOFTWARE: Miscroarray Probe Sequence Listing Generator V 1.1
if ERWITH: 25
if ERWITH: 25
if CONTINUED DATE: 2002 11 20
if CONTINUED DATE: 2002 11 
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Length 25;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Length 23;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Query Match 0.5%; Score 23; DB 1; Le Best Local Similarity 100.0%; Pred. No. 1.7e+02; Matches 23; Conservative 0; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Score 23.4; DB 1;
Pred. No. 1.7e+02;
0; Mismatches 1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  4495 GTAGGACCAAGTGATGACACCCCTC 4519
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1 GTTGGACCAAGTGATGACACCCCTC 25
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            2422 CTGCTGCAACAAGGTCTTAGTGA 2444
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1 crecrecaacaacarcriagica 23
28 AAAAAAAAAAAAAAAAAAA 5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ; Sequence 6, Application US/10160786; Publication No. US20030225013A1; GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Query Match
Best Local Similarity 96.0%;
Matches 24; Conservative (
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TYPE: DNA ORGANISM: Artificial Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ; OTHER INFORMATION: PCR Primer US-10-160-786-5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ; ORGANISM: Rattus norvegicus
US-10-719-956-529365
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       US-10-160-786-6/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TYPE: DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            RESULT 109
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ద
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ö
                                                                                                                                                                                                                          ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Gaps
                                                                                                                                                                                                                          Gaps
                                                                                                                                                                                                                          ;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ..
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    gequence 3, Application US/10942251

publication No. US20050069524A1

GENERAL INFORMATION:
APPLICANT: ROMANTCHIKV, Yuri

TITLE OF INVENTION: IMPROVED METHODS FOR INSERTION OF
TITLE OF INVENTION: UNCLEIC ACIDS INTO CIRCULAR VECTORS
FILE REFERENCE: 11639/1
CURRENT FILING DATE: 2004-09-16
PRIOR APPLICATION NUMBER: US/09/213,834

PRIOR PLICATION NUMBER: US/09/213,834

NUMBER OF SEQ ID NOS: 50

SOFTWARE: FastSEQ for Windows Version 4.0

SEQ ID NO 3

LENTH: 24
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  APPLICATION APPLICATION: THE OF INVENTION OF TITLE OF INVENTION: IMPROVED METHODS FOR INSERTION OF TITLE OF INVENTION: IMPROVED METHODS FOR INSERTION OF TITLE OF INVENTION: NUCLEIC ACIDS INTO CIRCULAR VECTORS FILE REFERENCE: 11639/1 CURRENT APPLICATION NUMBER: US/10/942,251 CURRENT FILING DATE: 2004-09-16 PRIOR APPLICATION NUMBER: 1994-12-17 NUMBER OF SEQ ID NOS: 50 SEPTIMES PARTES 1994-12-17 NUMBER OF SEQ ID NOS: 50 SECTION NOT SEQ ID NOS: 50 SECTION NOT SEQ ID NOS: 50 SEQ ID NOS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Query Match 0.5%; Score 24; DB 1; Length 24; Best Local Similarity 100.0%; Pred. No. 1.5e+02; Matches 24; Conservative 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Query Match 0.5%; Score 24; DB 1; Length 28; Best Local Similarity 100.0%; Pred. No. 1.7e+02; Matches 24; Conservative 0; Mismatches 0; Indels
                                                                                                                                    Length 24;
                                                                                                                                                                                                                     0; Indels
                                                                                                                               Score 24; DB 1; L. Pred. No. 1.5e+02;
                                                                                                                               Query Match 0.5%; Score 24; DB Best Local Similarity 100.0%; Pred. No. 1.5 Matches 24; Conservative 0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 5025 AAAAAAAAAAAAAAAAAAA 5048
||||||||||||||||||||
                                                                                                                                                                                                                                                                                                                 5025 AAAAAAAAAAAAAAAAAAA 5048
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         5025 AAAAAAAAAAAAAAAAAAAA 5048
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          24 AAAAAAAAAAAAAAAAAAA 1
                                                                                                                                                                                                                                                                                                                                                                                                  24 AAAAAAAAAAAAAAAAAAAAA 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ; Sequence 12, Application US/10942251; Publication No. US20050069524A1; GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ; OTHER INFORMATION: Cloning Vector US-10-942-251-12
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CTHER INFORMATION: Cloning Vector US-10-942-251-3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TYPE: DNA ORGANISM: Artificial Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ORGANISM: Artificial Sequence
         ; ORGANISM: Homo sapiens US-10-357-930-14833
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              RESULT 107
US-10-942-251-12/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               US-10-942-251-3/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TYPE: DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                     g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Š
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          g
                                                                                                                                                                                                                                                                                                                     ð
```

g

ઠે

```
Sequence 285, Application US/10721793

sequence 285, Application US/10721793

sequence 285, Application US/2050065331A1

GENERAL INFORMATION:

APPLICANT: Corona Villegas, Miguel

APPLICANT: Garcia Rodriguez, Ma Consuelo

APPLICANT: Garcia Rodriguez, Ma Consuelo

APPLICANT: Garcia Rodriguez, Ma Consuelo

APPLICANT: Gererii Lujan, Baltazar

APPLICANT: Gererii Lujan, Baltazar

APPLICANT: Recembinant Immunogens for the Generation of Antivenoms to the

TITLE OF INVENTION: Recombinant Immunogens for the Genus Centruroides

TITLE OF INVENTION: Venom of Scorpions of the Genus Centruroides

CURRENT APPLICATION NUMBER: US/10/721,793

CURRENT FILING DATE: 2003-11-26

PRIOR APPLICATION NUMBER: US 60/430,067

PRIOR APPLICATION NUMBER: US 509-10-22

NUMBER OF SEQ ID NOS: 294

SEQ ID NO 285

LENGTH: 24
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Gapa
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                .
0
                                                                                                                                                                       Sequence 10, Application US/10048866D; Publication No. US20050003476A1; GENERAL INFORMATION:
GENERAL INFORMATION:
TITLE OF INVENTION: Novel gene encoding glycosyltransferase; TILE REPRENCE: 1003552; CURRENT FILING DATE: 2002-02-04
NUMBER OF SEQ ID NOS: 14
SOFTWARE: Patentin Ver. 2.1
; SEQ ID NO 10
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence:Primer
US-10-048-866D-10
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Query Match 0.5%; Score 23; DB 1; Length 23; Best Local Similarity 100.0%; Pred. No. 1.7e+02; Matches 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          OTHER INFORMATION: PCR Reverse oligonucleotide primer FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 LOCATION: (1) \dots (\overline{2}4) OTHER INFORMATION: oligonucleotite T22NN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            5048 AAAAAAAAAAAAAAAACTCGAG 5070
                             2476 TAIGCCCTIACTIGIAIGIGCCA 2498
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     NAME/KEY: misc feature
LOCATION: (24)...(24)
OTHER INFORMATION: n is a, t, g, or c
                                                                        23 TATGCCCTTACTTGTATGTGCCA 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         23 AAAAAAAAAAAAAAAACTCGAG 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ģ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TYPE: DNA ORGANISM: Artificial sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             NAME/KEY: misc feature
LOCATION: (23)...(23)
OTHER INFORMATION: n is a, t,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 FEATURE:
NAME/KEY: primer bind
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TYPE: DNA ORGANISM: Artificial
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         RESULT 114
US-10-721-793-285/c
                                                                                                                                                                  US-10-048-866D-10/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        셤
                             8 8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ઠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Sequence 5, Application US/10667022
| Publication No. US20040063657A1
| GENERAL INFORMATION:
| APPLICANT: Susan M. Freier
| APPLICANT: Kenneth W. Dobie
| TITLE OF INVENTION: PISO EXPRESSION
| FILE REFERENCE: RTS-0376
| CURRENT APPLICATION NUMBER: US/10/667,022
| CURRENT FILING DATE: 2003-09-18
| SEQ ID NO S: 147
| LENGTH: 23
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                RESULT 112
US-10-667-022-6/c
US-10-667-022-6/c
Sequence 6, Application US/10667022
Publication No. US20040063657A1
GENERAL INFORMATION:
GENERAL INFORMATION:
APPLICANT: Nean M. Preier
APPLICANT: Kenneth W. Dobie
TITLE OF INVENTION: P150 EXFRESSION
FILE REFERENCE: RTS-0376
CURRENT APPLICATION NUMBER: US/10/667,022
CURRENT FILING DATE: 2003-09-18
NUMBER OF SEQ ID NOS: 147
SEQ ID NO 6
LENGTH: 23
                                                                                                                                                                                                                                                                                  ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ô
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Gaps
                                                                                                                                                                                                                                                                                    Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ö
                                                                                                                                                                                                                                                                                  ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ..
0
                                                                                                                                                                                                                                 Query Match 0.5%; Score 23; DB 1; Length 23; Best Local Similarity 100.0%; Pred. No. 1.7e+02; Matches 23; Conservative 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Query Match 0.5%; Score 23; DB 1; Length 23; Best Local Similarity 100.0%; Pred. No. 1.7e+02; Matches 23; Conservative 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     0.5%; Score 23; DB 1; Length 23; 100.0%; Pred. No. 1.7e+02; iive 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                             2476 TATGCCCTTACTTGTATGTGCCA 2498
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        2422 CTGCTGCAACAAGGTCTTAGTGA 2444
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CTGCTGCAACAAGGTCTTAGTGA 23
                                                                                                                                                                                                                                                                                                                                                                         23 TATGCCCTTACTTGTATGTGCCA 1
CURRENT FILING DATE: 2002-05-31
NUMBER OF SEQ ID NOS: 147
SEQ ID NO 6
LENGTH: 23
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TYPE: DNA ORGANISM: Artificial Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TYPE: DNA
ORGANISM: Artificial Sequence
                                                                                            TYPE: DNA
ORGANISM: Artificial Sequence
                                                                                                                                                           ) OTHER INFORMATION: PCR Primer US-10-160-786-6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ; OTHER INFORMATION: PCR Primer US-10-667-022-5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               OTHER INFORMATION: PCR Primer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Best Local Similarity 100.
Matches 23; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                             RESULT 111
US-10-667-022-5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          US-10-667-022-6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Query Match
                                                                                                                                          FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    FEATURE:
```

g

ઠે

```
TYPE: DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TYPE: DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ઠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     g
                                                                                                                                                            ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ö
                                                                                                                                                            Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Gaps
                                                                                                                                                            ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ö
                                                                                                                                                                                                                                                                                                                                                                       US-10-719-956-45762

Sequence 45762, Application US/10719956

Sequence 45762, Application US/10719956

Publication No. US20040146910A1

GENERAL INFORMATION:
TITLE OF INVENTION: Methods of Genetic Analysis of Rat
FILE REFERENCE: 3527.1

CURRENT PILION DATE: 2003-11-20

CURRENT FILING DATE: 2003-11-20

PRIOR PILING DATE: 2002 11 20

NUMBER OF SEQ ID NOS: 699466

SOFTWARE: Microarray Probe Sequence Listing Generator V 1.1

LENGTH: 25

"MANDER OF THE PROBLEM OF THE PROBL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Sequence 150046, Application US/10719956
Publication No. US20040146910A1
FURNEAL INFORMATION:
TITLE OF INVENTION: Methods of Genetic Analysis of Rat
FILE REPERBUES: 3527.1
CURRENT FILING DATE: 2003-11-20
FRIOR PPLICATION NUMBER: 60/427,836
PRIOR FILING DATE: 2002 11-20
NUMBER OF SEQ ID NOS: 699466
SOFTWARE: Microarray Probe Sequence Listing Generator V 1.1
LENGTH: 25
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Query Match 0.4%; Score 21.8; DB 1; Length 25; Best Local Similarity 92.0%; Pred. No. 2.3e+02; Matches 23; Conservative 0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       0.4%; Score 21.8; DB 1; Length 25; 92.0%; Pred. No. 2.3e+02; ive 0; Mismatches 2; Indels
                                                                        0.4%; Score 22; DB 1; Length 24; 100.0%; Pred. No. 2.1e+02; tive 0; Mismatches 0; Indels
                                                                                                                                                 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           4454 AAGGCACTGAAGTTGTCCAGGAAAT 4478
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        4592 AGGGCTTCATCGTAACTGCTTCTAG 4616
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1 AAGGCACGGAGGTTGTCCAGGAAAT 25
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               08-10-719-956-159330
; Sequence 159330, Application US/10719956
; Publication No. US20040146910A1
                                                                                                                                                                                                                      5025 AAAAAAAAAAAAAAAAA 5046
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1 AGGGCTTCATTGTGACTGCTTCTAG 25
                                                                                                                                                                                                                                                                ; TYPE: DNA
; ORGANISM: Rattus norvegicus
US-10-719-956-45762
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ; TYPE: DNA
; ORGANISM: Rattus norvegicus
US-10-719-956-150046
                                                                                                       Local Similarity 100.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Query Match
Best Local Similarity
Matches 23; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     US-10-719-956-150046
US-10-721-793-285
                                                                    Query Match
                                                                                                                                             Matches
                                                                                                                                                                                                                      8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 a
```

```
ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ö
                                                                                                                                                                                                                                                                                                                                                                                                                               Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                GENERAL INFORMATION:
APPLICANT: Ying, Vincent
APPLICANT: Ying, Vincent
APPLICANT: Ying, Vincent
APPLICANT: Wu, Paul
APPLICANT: Wu, Paul
APPLICANT: Gray, Gary S.
TITLE OF INVENTION: COSTIMULATORY RECEPTOR LOCUS AND USES THEREOF
TITLE OF INVENTION: COSTIMULATORY RECEPTOR LOCUS AND USES THEREOF
TITLE OF INVENTION: COSTIMULATORY RECEPTOR LOCUS AND USES THEREOF
TITLE OF INVENTION: 2002-02-27
CURRENT APPLICATION NUMBER: US/10/085,906
CURRENT APPLICATION NUMBER: US/0/126,215
PRIOR FILING DATE: 1999-03-25
PRIOR FILING DATE: 2000-03-24
PRIOR FILING DATE: 2000-03-24
PRIOR FILING DATE: 2000-03-24
                                                                                                                                                                                                                                                                                                                                                                                                                            ;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ö
GENERAL INFORMATION:

APPLICANT: Xue Mei Zhou
TITLE OF INVENTION: Methods of Genetic Analysis of Rat
TITLE OF INVENTION: Methods of Genetic Analysis of Rat
FILE REPERENCE: 3227.1
CURRENT APPLICATION NUMBER: 08/10/719,956
CURRENT FILING DATE: 2003-11-20
PRIOR APPLICATION NUMBER: 60/427,836
PRIOR FILING DATE: 2002 11 20
NUMBER OF SEQ ID NOS: 699466
SOFTWARE: Microarray Probe Sequence Listing Generator V 1.1
SEQ ID NO 159330
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Query Match 0.4%; Score 21.8; DB 1; Length 25; Best Local Similarity 92.0%; Pred. No. 2.3e+02; Matches 23; Conservative 0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Query Match 0.4%; Score 21.8; DB 1; Length 25; Best Local Similarity 92.0%; Pred. No. 2.3e+02; Matches 23; Conservative 0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 4532 AGTCCCTGCCCGTGGGACATCATGA 4556
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          4519
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1 Adricticiciordidedacaticatea 25
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            drrddaccaadrcardacaccccrc 25
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      4495 GTAGGACCAAGTGATGACACCCCTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ; Sequence 78, Application US/10085906; Publication No. US20030054371A1
                                                                                                                                                                                                                                                                                                    ; ORGANISM: Rattus norvegicus
US-10-719-956-159330
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ; ORGANISM: Rattus norvegicus
US-10-719-956-529364
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                RESULT 119
US-10-085-906-78/C
```

```
ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ઠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            à
                                                                                                                                                                                       ö
                                                                                                                                                                                       Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Gaps
                                                                                                                                                                                       ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ö
                                                                                                                                                                                                                                                                                                                                            0.4%; Score 21.2; DB 1; Length 27;
88.5%; Pred. No. 2.8e+02;
tive 0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Query Match 0.4%; Score 21; DB 1; Length 21; Best Local Similarity 100.0%; Pred. No. 2.2e+02; Matches 21; Conservative 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CURRENT APPLICATION DATA:
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/805,813
FILING DATE: No. US20020166142A1 yet assigned CLASSIFICATION: 800
PRIOR APPLICATION BOTA:
APPLICATION NUMBER: US/08/809
FILNG APPLICATION DATA:
APPLICATION NUMBER: US 8-187763
FILNG DATE: 125-MAR-1996
PRIOR APPLICATION NUMBER: US 8-187763
FILING DATE: 17-JUL-1996
ATTORNEY/AGENT INFORMATION:
NAME: Bastian, Kevin L.
REGISTRATION NUMBER: 83776-000000
TELECOMMUNICATION INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    E: Townsend and Townsend and Crew LLP Two Embarcadero Center, Eighth Floor
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ; NAME/KEY: -

; LOCATION: 1..21

; OTHER INFORMATION: /note= "BKSBE primer"

US-08-805-813-4
                                                                                                                                                                                                                       5025 AAAAAAAAAAAAAAAAAAAAAAAA 5050
NUMBER OF SEQ ID NOS: 545
SOFTWARE: FastSEQ for Windows Version 4.0
SEQ ID NO 78
LENGTH: 27
                                                                                                                                                                                                                                                         27 AAAAATAAAATAAAAATAAAAA 2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     PC-DOS/MS-DOS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ZIP: 94111-3834
COMPUTER READABLE FORM:
MEDIUM TYPE: Ploppy disk
COMFUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TELEPHONE: (415) 576-0200
TELEPAX: (415) 576-0300
INFORMATION FOR SEQ ID NO: 4:
SEQUENCE CHARACTERISITGS:
LENGTH: 21 base pairs
                                                                                                                                                 Query Match
Best Local Similarity 88.5
Matches 23; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          nucleic acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CITY: San Francisco
STATE: California
                                                                         ; TYPE: DNA
; ORGANISM: Homo sapiens
US-10-085-906-78
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TOPOLOGY: linear MOLECULE TYPE: DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       STRANDEDNESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         STATE: CA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       STREET:
                                                                                                                                                                                                                         ò
```

```
APPLICANT: Jones, Brandt B.
APPLICANT: Goose, Brandt B.
APPLICANT: Glazer, Geoff
APPLICANT: Glazer, Peter M.
TILE OF INVENTION: OLIGONUCLEOTIDE COMPLEXES FOR USE AS ANTI-VIRAL THERAPEUTICS
FILE REFERENCE: 007180-19
CURRENT FILING DATE: 2004-04-21
PRIOR APPLICATION NUMBER: 60/464,270
PRIOR PILING DATE: 2003-04-21
NUMBER OF SEQ ID NOS: 12
SOFTWARE: Patentin version 3.2
SEQ ID NO 7
LENGTH: 21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ö
                                                                                                                                                                                                                                      APPLICANT: Bratzler, Robert L.
APPLICANT: Petersen, Deanna M.
APPLICANT: Petersen, Deanna M.
APPLICANT: Petersen, Deanna M.
APPLICANT: Petersen, Ives
TITLE OF INVENTION: Treatment of Asthma and Allergy
CURRENT APPLICATION NUMBER: US/10/831,778
CURRENT FILING DATE: 2004-04-23
FRIOR PELLING DATE: 2000-02-03
NUMBER OF SEQ ID NOS: 1093
SOFTWARE: FastSEQ for Windows Version 3.0
LENGTH: 21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Length 21;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    0.4%; Score 21; DB 1; Length 21;
100.0%; Pred. No. 2.28+02;
iive 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Query Match , 0.4%; Score 21; DB 1; Le
Best Local Similarity 100.0%; Pred. No. 2.2e+02;
Matches 21; Conservative 0; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  OTHER INFORMATION: Synthetic Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               5025 AAAAAAAAAAAAAAAAAA 5045
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          5025 AAAAAAAAAAAAAAAAAA 5045
                                                                                                                                                                  Sequence 912, Application US/10831778
Publication No. US20040235774A1
GENERAL INFORMATION:
24
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ; Sequence 7, Application US/10830287A; Publication No. US20050038238A1; GENERAL INFORMATION: APPLICANT: Kriesel, John D.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            21 AAAAAAAAAAAAAAAAAAA 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TYPE: DNA ORGANISM: Artificial Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Best Local Similarity 100.0
Matches 21; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ORGANISM: Variola virus
                                                                                                                                             US-10-831-778-912/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           RESULT 122
US-10-830-287A-7/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            US-10-831-778-912
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          US-10-830-287A-7
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TYPE: DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Query Match
```

```
RESULT 127
US-10-64-000-3/c
Sequence 3, Application US/10664000
; Publication No. US20040248144A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        JS-10-930-301-98/c
                                                                                                                                                                                                                                                                                                                       FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               g
RESULT 123
US-10-601-140A-43
US-10-601-140A-43

Sequence 43, Application US/10601140A

Publication No. US20050053942A1

GENERAL INFORMATION:
APPLICANT: SAKUPINEN, SAKARI

APPLICANT: ARUPPINEN, NANA

TITLE OF INVENTION: NUCLEDOTIDE SEQUENCE

TITLE OF INVENTION: NUCLEDOTIDE SEQUENCE

TITLE OF INVENTION NUMBER: US/10/601,140A

CURRENT RELICATION NUMBER: US 60/390,928

PRIOR APPLICATION NUMBER: US 60/390,928

NUMBER OF SEQ ID NOS: 45

SOFTWARE: Patentin Ver. 3.2

SEQ ID NO 43

LENGTH: 21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Sequence 4, Application US/10930301

Sequence 4, Application US/10930301

Bublication No. US20050026207A1

GENERAL INFORMATION:

APPLICANT: ISSA, Jean-Pierre

TITLE OF INVENTION: METHODS OF USE THEREFOR

FILE REPERENCE: JHU1590

CURRENT APPLICATION NUMBER: US/10/930,301

CURRENT FILING DATE: 1099-09-15

PRIOR APPLICATION NUMBER: US/9/398,522

PRIOR PILING DATE: 1999-09-15

NUMBER OF SEQ ID NOS: 120

SOFTWARE: FastSEQ for Windows Version 4.0

SEQ ID NO 4

LENGTH: 26
                                                                                                                                                                                                                                                                                                                                                                                                                                                         ; OTHER INFORMATION: Description of Artificial Sequence: Primer US-10-601-140A-43
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Query Match 0.4%; Score 20.4; DB 1; Length 26; Best Local Similarity 87.5%; Pred. No. 3.1e+02; Matches 21; Conservative 1; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       0.4%; Score 21; DB 1; Length 21;
100.0%; Pred. No. 2.2e+02;
tive 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               OTHER INFORMATION: Bisulfite-PCR primer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        5044 AAAAAAAAAAAAAAAAAAAAAACTC 5067
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1 ACRADADADADADADADATCTC 24
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    5025 AAAAAAAAAAAAAAAAAA 5045
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     US-10-930-301-44
; Sequence 44, Application US/10930301
; Publication No. US20050026207A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1 AAAAAAAAAAAAAAAAA 21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      FEATURE:
NAME/KEY: misc feature
LOCATION: (0)...(0)
CTHER INFORMATION: r = G or A
US-10-930-301-4
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TYPE: DNA
ORGANISM: Artificial Sequence
                                                                                                                                                                                                                                                                                                                                                                                                TYPE: DNA
ORGANISM: Artificial Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Query Match
Best Local Similarity 100.0
Matches 21; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               RESULT 124
US-10-930-301-4
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ਨੇ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ð
```

```
ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ö
                                                                                                                                                                                                                                                                                                                                                                               OTHER INFORMATION: Primer useful for bisulfite/PCR analysis of OTHER INFORMATION: CACNAIG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Sequence 98, Application US/10930301
; Sequence 98, Application US/10930301
; Publication No. US20050026207A1
; GENERAL INFORMATION:
; TITLE OF INVENTION: CACNAIG POLYNUCLEOTIDE POLYPEPTIDE AND TITLE OF INVENTION: METHODS OF USE THEREFOR
; TITLE OF INVENTION: CACNAIG POLYNUCLEOTIDE POLYPEPTIDE AND TITLE OF INVENTION: METHODS OF USE THEREFOR
; FILE REFERENCE: JUL590
; CURRENT APPLICATION NUMBER: US/10/930,301
; CURRENT FILING DATE: 1999-09-15
; PRIOR FILING DATE: 1999-09-15
; NUMBER OF SEQ ID NOS: 120
; SOFTWARE: FastSEQ for Windows Version 4.0
; SEQ ID NO 98
; LENGTH: 26
APPLICANT: 1884, Jean-Pierre
TITLE OF INVENTION: CACNAIG POLYNUCLEOTIDE POLYPEPTIDE AND
TITLE OF INVENTION: METHODS OF USE THEREFOR
FILLE REPERENCE: JUL1590
CURRENT APPLICATION NUMBER: US/10/930,301
CURRENT FILLING DATE: 2004-08-30
PRIOR APPLICATION NUMBER: US/09/398,522
PRIOR PELING DATE: 1999-09-15
NUMBER OF SEQ ID NOS: 120
SOFTWARE: FASISEQ for Windows Version 4.0
SEQ ID NO 44
LENGTH: 26
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Length 26;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Score 20.4; DB 1; Length 26;
Pred. No. 3.1e+02;
1; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Query Match 0.4%; Score 20.4; DB 1;
Best Local Similarity 87.5%; Pred. No. 3.1e+02;
Matches 21; Conservative 1; Mismatches 2;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            5044 AAAAAAAAAAAAAAAAAAAACTC 5067
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1 ACRAAAAAAAAAAAAAAAAATCTC 24
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 26 ACRAMAMAMAMAMAMAMATCTC 3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              FEATURE: OTHER INFORMATION: Target sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                NAME/KEY: misc_feature;
; LOCATION: (0)...(0);
; OTHER INFORMATION: Y = C or T
US-10-930-301-98
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ouely match
Best Local Similarity 87.5%;
Matches 21; Conservative 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TYPE: DNA
ORGANISM: Artificial Sequence
                                                                                                                                                                                                                                                                                                                     TYPE: DNA
ORGANISM: Artificial Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                            FEATURE:

NAME/KEY: misc feature

LOCATION: (0)...(0)

CTHER INFORMATION: r = G or US-10-930-301-44
```

```
APPLICANT: JACOBSEN, NANA
TITLE OF INVENTION: METHODS AND SYSTEMS FOR DETECTION AND ISOLATION OF JILLS OF INVENTION: METHODS AND SYSTEMS FOR DETECTION AND ISOLATION OF JILLS OF INVENTION: MUCHEOTIDE SEQUENCE
FILE REFERENCE: 57764 (71994)
CURRENT APPLICATION NUMBER: US/10/601,140A
CURRENT APPLICATION NUMBER: US 60/390,928
PRIOR APPLICATION NUMBER: US 60/390,928
PRIOR FILING DATE: 2002-06-24
SOFTWARE: PATENTING DATE: 2002-06-24
SOFTWARE: PATENTING NOS: 45
SOFTWARE: PATENTING NOS: 45
LENGTH: 22
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    OTHER INFORMATION: Description of Artificial Sequence: Synthetic OTHER INFORMATION: oligonucleotide
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Length 22;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Indela
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Query Match 0.4%; Score 20.2; DB 1; Best Local Similarity 95.2%; Pred. No. 2.7e+02; Matches 20; Conservative 1; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        5024 TAAAAAAAAAAAAAAAAAA 5044
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           US-10-601-140A-45/c
; Sequence 45, Application US/10601140A
; Publication No. US20050053942A1
; GENERAL INFORMATION:
; APPLICANT: KAUPPINEN, SAKARI
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ; OTHER INFORMATION: a, t, c or g
US-10-601-140A-32
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           NAME/KEY: modified_base
LOCATION: (19)
OTHER INFORMATION: LNA monomer
FEATURE:
NAME/KEY: modified_base
                                                                                                                                                NAME/KEY: modified_base
LOCATION: (11)
OTHER INFORMATION: LNA monomer
                                                                                                                                                                                                                                                                                                                                    NAME/KEY: modified_base
LOCATION: (15)
OTHER INFORMATION: LNA monomer
                                                                                                                                                                                                                                                                                                                                                                                                           FEATURE:
NAME/KEY: modified_base
LOCATION: (17)
OTHER INFORMATION: LNA monomer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      LOCATION: (1)..(20)
OTHER INFORMATION: LNA monomer
            THER INFORMATION: LNA monomer
                                                                                LOCATION: (9)
OTHER INFORMATION: LNA monomer
                                                                                                                                                                                                                                                                  LOCATION: (13)
OTHER INFORMATION: LNA monomer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ; OTHER INFORMATION: a, t, c or US-10-601-140A-45
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TYPE: DNA
ORGANISM: Artificial Sequence
FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       FEATURE:
NAME/KEY: modified base
                                                        modified_base
                                                                                                                                                                                                                                               NAME/KEY: modified_base
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          NAME/KEY: modified_base
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   LOCATION:
                                                                                                                                                                                                                      PEATURE:
                                                                                                                                                                                                                                                                                                              FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              RESULT 128
US-10-601-1404-12/C
; Sequence 32, Application US/10601140A
; Publication No. US20050053942A1
; GENERAL INFORMATION:
; APPLICANT: AACUPINEN: SACARI
; APPLICANT: AACUPINEN: METHODS AND SYSTEMS FOR DETECTION AND ISOLATION OF A
; TITLE OF INVENTION: MUCHEOTIDE SEQUENCE
; FILE REPERENCE: 5776 (71994)
; CURRENT PILING DATE: 2003-06-20
; PRIOR PELICATION NUMBER: US 60/390,928
; RIOR FILING DATE: 2002-06-24
; NUMBER OF SEQ ID NOS: 45
; SEQ ID NO 3.2
; SEQ ID NO 3.2
; LENGTH: 22
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              FEATURE:
OTHER INFORMATION: Description of Artificial Sequence: Synthetic
OTHER INFORMATION: oligonucleotide
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Length 22;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                   FEATURE:
OTHER INFORMATION: Anchored capture oligonucleotide
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Score 20.2; DB 1;
Pred. No. 2.7e+02;
1; Mismatches 0;
GENERAL INFORMATION:
APPLICANT: Mir, Kalim
TITLE OF INVENTION: Arrays and Methods of Use
TITLE OF INVENTION: Arrays and Methods of Use
FILE REFERENCE: 8654/2182
CURRENT APPLICATION NUMBER: US/10/664,000
CURRENT FILING DATE: 2003-09-16
PRIOR APPLICATION NUMBER: PCT/GB02/01245
PRIOR PILING DATE: 2001-03-16
PRIOR PILING DATE: 2001-03-16
PRIOR APPLICATION NUMBER: GB0118879.6
PRIOR PILING DATE: 2001-03-16
PRIOR PILING DATE: 2001-03-16
SPRIOR PILING DATE: 2001-03-16
SPRIOR PILING DATE: 2001-03-16
SPRIOR PILING DATE: 2001-03-16
SOFTWARE: PATENTIN VERSION 3.2
SEQ ID NO 3:
LENGTH: 22
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ; LOCATION: (22) ... (22); CTHER INFORMATION: n is a, c, g, or US-10-664-000-3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       5024 TAAAAAAAAAAAAAAAAAA 5044
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       21 BAAAAAAAAAAAAAAA 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           LOCATION: (3)
OTHER INFORMATION: LNA monomer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  NAME/KEY: modified_base
LOCATION: (5)
THER INFORMATION: LNA monomer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   LOCATION: (1)
THER INFORMATION: LNA monomer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TYPE: DNA
ORGANISM: Artificial Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Query Match
Best Local Similarity 95.2%;
Matches 20; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             NAME/KEY: modified_base
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     NAME/KEY: modified_base
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              NAME/KEY: modified_base
COCATION: (7)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     NAME/KEY: misc feature
                                                                                                                                                                                                                                                                                                                                                                                   TYPE: DNA ORGANISM: Artificial
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ઠે
```

Gaps

ô

```
US-10-085-906-144/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TYPE: DNA
                                                                                                                                                                                                                             TYPE: DNA
                                                                                                                                                                                                                                                                                                                                                                                                        ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                             g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       В
                                                ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Gaps
                                                Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Gaps
                                                ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ö
                                                                                                                                                                                                                                           GENERAL INFORMATION:
GENERAL INFORMATION:
TITLE OF INVENTION: Methods of Genetic Analysis of Rat;
TITLE OF INVENTION: Methods of Genetic Analysis of Rat;
TITLE PILE REPRENCE: 3527.1
CURRENT FILING DATE: 2003-11-20
FRIOR PILING DATE: 2002-11 20
FRIOR FILING DATE: 2002-11 20
NUMBER OF SEQ ID NOS: 699466
SOFTWARE: Microarray Probe Sequence Listing Generator V 1.1
LEWOTH: 25
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Sequence 150045. Application US/10719956
; Publication No. US20040146910A1
; GENERAL INFORMATION:
; APPLICATH: Xea Mei Zhou
; TILLE OF INVENTION: Methods of Genetic Analysis of Rat
; TILLE OF INVENTION: Wethods of Genetic Analysis of Rat
; TILLE OF INVENTION WHRER: US/10/719,956
; CURRENT APPLICATION WHRER: 05/427,836
; PRIOR PILING DATE: 2002 11 20
; NUMBER OF SEQ ID NOS: 699466
; SOFTWARE: Microarray Probe Sequence Listing Generator V 1.1
; LENGTH: 25
Query Match 0.4%; Score 20.2; DB 1; Length 22; Best Local Similarity 95.2%; Pred. No. 2.7e+02; Matches 20; Conservative 1; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Query Match 0.4%; Score 20.2; DB 1; Length 25; Best Local Similarity 88.0%; Pred. No. 3.1e+02; Matches 22; Conservative 0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           0.4%; Score 20.2; DB 1; Length 25;
larity 88.0%; Pred. No. 3.1e+02;
Conservative 0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         4454 AAGGCACTGAAGTTGTCCAGGAAAT 4478
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     4592 AGGGCTTCATCGTAACTGCTTCTAG 4616
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ; Sequence 159329, Application US/10719956
; Publication No. US20040146910A1
; GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1 AAGGCACGGAGGATGTCCAGGAAAT 25
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1 AGGCTTCATTGAGACTGCTTCTAG 25
                                                                                       5024 TAAAAAAAAAAAAAAAA 5044
                                                                                                                                   21 BAAAAAAAAAAAAAAAAAA 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TYPE: DNA
ORGANISM: Rattus norvegicus
US-10-719-956-45761
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ; ORGANISM: Rattus norvegicus US-10-719-956-150045
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          APPLICANT: Xue Mei Zhou
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Local Similarity
hes 22; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                RESULT 132
US-10-719-956-159329
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   RESULT 131
US-10-719-956-150045
                                                                                                                                                                                                                           US-10-719-956-45761
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Query Match
Best Local S
Matches 22
                                                                                                                                                                                                 RESULT 130
                                                                                            8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              셤
```

```
Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Sequence 144, Application US/10085906
| Publication No. US20030054371A1
| GENERAL INPORMATION:
| APPLICANT: Ying, Vincent
| APPLICANT: Wu, Paul
| APPLICANT: Wu, Paul
| TITLE OF INVENTION: POLYMORPHIC ELEMENTS IN THE
| TITLE OF INVENTION: COSTIMULATORY RECEPTOR LOCUS AND USES THEREOF
| TITLE OF INVENTION: COSTIMULATORY RECEPTOR LOCUS AND USES THEREOF
| TITLE OF INVENTION: COSTIMULATORY RECEPTOR LOCUS AND USES THEREOF
| TITLE OF INVENTION: COSTIMULATORY RECEPTOR LOCUS AND USES THEREOF
| FILE REFERENCE: GNN-5343CP2
| PRIOR RILING DATE: 2002-2-7
| PRIOR APPLICATION NUMBER: US 09/126,215
| PRIOR FILING DATE: 2000-03-24
| NUMBER OF SEQ ID NOS: 545
| SOFTWARE: FastSEQ for Windows Version 4.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sequence 415353, Application US/10719956
; Publication No. US20040146910A1
; Publication No. US20040146910A1
; Publication No. US20040146910A1
; PUBLICANT: Xue Mei Zhou
; TITLE OF INVENTION: Methods of Genetic Analysis of Rat
; TITLE REFERENCE: 3.201
; CURRENT APPLICATION NUMBER: US/10/719,956
; CURRENT FILING DATE: 2003-11-20
; PRIOR FILING DATE: 2002-11-20
; ROWERE OF SEQ ID NOS: 699466
; SOFTWARE: Microarray Probe Sequence Listing Generator V 1.1
SEQ ID NO 415353
                                                                                                                                                                                                                                                                                                                                                                                                              Score 20.2; DB 1; Length 25;
Pred. No. 3.1e+02;
0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Score 20.2; DB 1; Length 25;
Pred. No. 3.1e+02;
                      FILE REFERENCE: 3527.1
CURRENT APPLICATION NUMBER: US/10/719,956
CURRENT FILING DATE: 2003-11-20
PRIOR APPLICATION NUMBER: 60/427,836
PRIOR FILING DATE: 2002 11 20
NUMBER OF SEQ ID NOS: 699466
SOFTWARE: Microarray Probe Sequence Listing Generator V 1.1
SEQ ID NO 159329
LENGTH: 25
TITLE OF INVENTION: Methods of Genetic Analysis of Rat
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   4532 AGTCCCTGCCCGTGGGACATCATGA 4556
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   4637 GGAAATAAAACCTACTGATTTGTAT 4661
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1 AGTCTCTGCCTGAGGGACATCATGA 25
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1 GGAAATAAATCCTGCTGACTTGTAT 25
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Query Match
Best Local Similarity 88.0%;
Matches 22; Conservative (
                                                                                                                                                                                                                                                                                                                                                                                                                           Query Match 0.4%;
Best Local Similarity 88.0%;
Matches 22; Conservative
                                                                                                                                                                                                                                                                                                                                  ; ORGANISM: Rattus norvegicus US-10-719-956-159329
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        , ORGANISM: Rattus norvegicus
US-10-719-956-415353
```

```
APPLICANT: Susan M. Freier

APPLICANT: Susan M. Preier

TITLE OF INVENTION: ANTISENSE MODULATION OF PHOSPHOINOSITIDE-3-KINASE, REGULATORY SUBITILES OF INVENTION: P150 EXPRESSION

TITLE OF INVENTION: P150 EXPRESSION

FILE REPERRACE: RTS-0.376

CURRENT APPLICATION NUMBER: US/10/160,786

CURRENT FILING DATE: 2002-05-31

SEQ ID NOS: 147

LENGTH: 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Sequence 13, Application US/10160786

Sequence 13, Application US/10160786

Publication No. US20030225013A1

GENERAL INFORMATION:
GENERAL INFORMATION:
APPLICANT: Susan M. Freier
APPLICANT: Kenneth W. Dobie
TITLE OF INVENTION: ANTISENSE MODULATION OF PHOSPHOINOSITIDE-3-KINASE, REGULATORY SUBITILE OF INVENTION: P150 EXPRESSION
FILE REPERENCE: RTS-0376
CURRENT APPLICATION NUMBER: US/10/160,786
CURRENT PILING DATE: 2002-05-31
NUMBER OF SEQ ID NOS: 147

SEQ ID NO 13

BENGTH: 20

WHICH IS NO 13

BENGTH: 20
                                                                                                                                                                                                                                                                                                                                                                                                                          ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ö
                                                                                                                                                                                                                                                                                                                                                                                                                          ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ö
                                                                                                                                                                                                                                                                                                                                                           Length 20;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Query Match 0.4%; Score 20; DB 1; Length 20; Best Local Similarity 100.0%; Pred. No. 2.6e+02; Matches 20; Conservative 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Length 20;
                                                                                                                                                                                                                                                                                                                                                           DB 1; Le
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           0.4%; Score 20; DB 1; L. 100.0%; Pred. No. 2.6e+02;
                                                                                                                                                                                                                          ; FEATURE:
; OTHER INFORMATION: AntiBense Oligonucleotide
US-10-160-786-11
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ; OTHER INFORMATION: Antisense Oligonucleotide US-10-160-786-12
                                                                                                                                                                                                                                                                                                                                                    Query Match

0.4%; Score 20; DB
Best Local Similarity 100.0%; Pred. No. 2.6
Matches 20; Conservative 0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ) OTHER INFORMATION: Antisense Oligonucleotide US-10-160-786-13
CURRENT APPLICATION NUMBER: US/10/160,786
CURRENT FILING DATE: 2002-05-31
NUMBER OF.SEQ ID NOS: 147
SEQ ID NO 11
LENGTH: 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Sequence 12, Application US/10160786
Publication No. US20030225013A1
GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    92 CGGTCTGCACTTCTCTCCCG 111
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     43 CGTTTGCTGGGGCTGCAGCA 62
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 20 cerrrecreedecrecace 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        20 CGGTCTGCACTTCTCTCCCG 1
                                                                                                                                                                  TYPE: DNA ORGANISM: Artificial Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ORGANISM: Artificial Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TYPE: DNA
ORGANISM: Artificial Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               JS-10-160-786-12/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            RESULT 138
US-10-160-786-13/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TYPE: DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    <sup>.</sup> සු
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ਨੇ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  RESULT 136
US-10-160-786-11/c
US-10-160-786.11/c
; Sequence 11, Application US/10160786
; Fublication No. US20030225013A1
; GENERAL INFORMATION:
; APPLICANT: Susan M. Preier
; APPLICANT: Kenneth W. Dobie
; TITLE OF INVENTION: ANTISENSE MODULATION OF PHOSPHOINOSITIDE-3-KINASE, REGULATORY SUE
; TITLE OF INVENTION: P100 EXPRESSION
; FILE REFERENCE: RTS-0376
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            US-09-976-900A-55

Sequence 55, Application US/09976900A

Publication Workwarton:
GENERAL INFORMATION:
APPLICANT: Mirkin, Chad A.
APPLICANT: Micio, Robert L.
APPLICANT: Elefainger, Robert L.
APPLICANT: Elefainger, Robert L.
APPLICANT: Elefainger, Robert C.
APPLICANT: Elghanian, Robert
APPLICANT: Bload A.
TITLE OF INVENTION: NANOPARTICLES HAVING OLIGONUCLEOTIDES ATTACHED THERETO
TITLE OF INVENTION: NANOPARTICLES
FRICH REPEARANCE: 00-13-123
FRICH RELING DATE: 1999-06-25
FRICH PLING DATE: 1999-01-29
FRICH RELING DATE: 1996-01-29
FRICH RELING DATE: 1996-07-29
FRICH RELING DATE: 1996-07-29
FRICH RELING DATE: 2000-04-26
NUMBER OF SEQ ID NOS: 64
SEOFTWARE: MICCOSOFT WORD CONDO-05-26
NUMBER OF SEQ ID NOS: 64
SEOFTWARE: MICCOSOFT WORD CONDO-05-26
FRICH: NANOPE: 
                                                                                                                                                                                                                                                              ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ö
                                                                                                                                                                                                                                                              Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Gaps
                                                                                                                                                                                                                                                              ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ö
                                                                                                                                                                                         0.4%; Score 20.2; DB 1; Length 26; 88.0%; Pred. No. 3.2e+02; tive 0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     OTHER INFORMATION: Description of Artificial Sequence:random OTHER INFORMATION: synthetic sequence US-09-976-900A-55
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Query Match

0.4%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 2.6e+02;
Matches 20; Conservative 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                      5025 AAAAAAAAAAAAAAAAAAAAAAAA 5049
                                                                                                                                                                                                                                                                                                                                                                               26 AAAAAATAAAAATAAAAA 2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    5025 AAAAAAAAAAAAAAAA S044
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1 AAAAAAAAAAAAAAA 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TYPE: DNA
ORGANISM: Artificial Sequence
                                                                                                                                                                                                                   Best Local Similarity 88.0 Matches 22; Conservative
                                                           TYPE: DNA
CORGANISM: Homo sapiens
US-10-085-906-144
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        RESULT 135
US-09-976-900A-55
SEQ ID NO 144; LENGTH: 26
                                                                                                                                                                                               Query Match
                                                                                                                                                                                                                                                                                                                      ઠ
                                                                                                                                                                                                                                                                                                                                                                        셤
```

```
FILE OF INVENTION: ANTISENSE MODULATION OF PHOSPHOINOSITIDE-3-KINASE, REGULATORY SUBL.
TITLE OF INVENTION: ANTISENSE MODULATION OF PHOSPHOINOSITIDE-3-KINASE, REGULATORY SUBL.
TITLE OF INVENTION: P150 EXPRESSION
FILE REFERENCE: RTS-0376
CURRENT APPLICATION NUMBER: US/10/160, 786
CURRENT FILING DATE: 2002-05-31
NUMBER OF SEQ ID NOS: 147
SEQ ID NO 16
LENGTH: 20
TYPE: NATE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         APPLICANT: Susan M. Preier
APPLICANT: Susan M. Preier
APPLICANT: Susan M. Preier
TITLE OF INVENTION: ANTISENSE MODULATION OF PHOSPHOINOSITIDE-3-KINASE, REGULATORY SUBULITLE OF INVENTION: P150 EXPRESSION
TITLE OF INVENTION: P150 EXPRESSION
TITLE OF INVENTION: P150 EXPRESSION
CURRENT APPLICATION WUMBER: US/10/160,786
CURRENT APPLICATION WUMBER: 2002-05-31
NUMBER OF SEQ ID NOS: 147
SEQ ID NO 17
LENGTH: 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Sequence 18, Application US/10160786
| Sequence 18, Application US/10160786
| Publication No. US20030225013A1
| Substantion No. US20030225013A1
| GENERAL INFORMATION:
| APPLICANT: Susan M. Freier
| APPLICANT: Senneth W. Dobie
| TITLE OF INVENTION: ANTIENSE MODULATION OF PHOSPHOINOSITIDE-3-KINASE, REGULATORY SUB:
| TITLE OF INVENTION: P150 EXPRESSION
| TITLE OF INVENTION: P150 EXPRESSION
| TITLE OF INVENTION: P150 EXPRESSION
| TITLE OF INVENTION OF PROPERTION OF PROPERTIES OF SEQ ID NOS: 147
| SEQ ID NO 18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Length 20;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Length 20;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               DB 1; Le
2.6e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Query Match
0.4%; Score 20; DB 1; L.
Best Local Similarity 100.0%; Pred. No. 2.6e+02;
Matches 20; Conservative 0; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   FEATURE:
OTHER INFORMATION: Antisense Oligonucleotide
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            , OTHER INFORMATION: Antisense Oligonucleotide US-10-160-786-17
                                                                                                                                                                                                                                                                                                                                                                                                                         ) OTHER INFORMATION: Antisense Oligonucleotide US-10-160-786-16
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             0.4%; Score 20; DB 100.0%; Pred. No. 2.6 tive 0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ; Sequence 17, Application US/10160786; Publication No. US20030225013A1; GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       559 CTTGCCATTATGGGAAATCA 578
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           534 AACCTTACTAAAGACCACAG 553
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                20 crreccarrareccaarca 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      20 AACCTTACTAAAGACCACAG 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TYPE: DNA ORGANISM: Artificial Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ORGANISM: Artificial Sequence
                                                                                                                                                                                                                                                                                                                                                                                     ORGANISM: Artificial Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Best Local Similarity 100.
Matches 20, Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    US-10-160-786-17/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TYPE: DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          RESULT 143
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ઠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Sequence 15, Application US/10160786

Publication No. US2030225013A1

GENERAL INFORMATION:
GENERAL INFORMATION:
GENERAL INFORMATION:
FIGURAL INFORMATION:
TITLE OF INVENTION: ANTISENSE MODULATION OF PHOSPHOINOSITIDE-3-KINASE, REGULATORY SUBTITLE OF INVENTION: PL50 EXPRESSION
FILE REFERENCE: RTS-0376
CURRENT APPLICATION NUMBER: US/10/160,786
CURRENT FILING DATE: 2002-05-31

NUMBER OF SEQ ID NOS: 147

SEQ ID NO 15.
                                                                                                                                                                                                                                                                                                                                       Sequence 14, Application US/10160786
Publication No. US20030225013A1
GENERAL INFORMATION:
APPLICANT: Susan M. Freier
APPLICANT: Kenneth W. Dobie
TITLE OF INVENTION: P150 EXPRESSION
FILE REFERENCE: RTS-0376
CURRENT APPLICATION NUMBER: US/10/160,786
CURRENT APPLICATION NUMBER: US/10/160,786
CURRENT APPLICATION NUMBER: US/10/160,786
CURRENT FILING DATE: 2002-05-31
NUMBER: OF SEQ ID NOS: 147
SEQ ID NO 14
LENGTH: 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          .;
0
                                                                                                                                                               ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Gaps
                                                                                                                                                               Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ö
                                                                                                                                                               ;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      0.4%; Score 20; DB 1; Length 20;
100.0%; Pred. No. 2.6e+02;
ive 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Length 20;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             0; Indels
                                                                                                                                                                 Indels
                                                                                                                                                                 ;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Query Match 0.4%; Score 20; DB 1; L
Best Local Similarity 100.0%; Pred. No. 2.6e+02;
Matches 20; Conservative 0; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       OTHER INFORMATION: Antisense Oligonucleotide US-10-160-786-15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ; OTHER INFORMATION: Antisense Oligonucleotide
US-10-160-786-14
                                                                                                                                                                   Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     RESULT 141
US-10-160-786-16/c
; Sequence 16, Application US/10160786
; Publication No. US20030225013A1
; PUBLICATURNATION:
; APPLICANT: Susan M. Freier
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       486 CCTCTGAACGATTTTGACAC 505
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             391 CTATGAAGAAGACCCTTCG 410
                                                                                                                                                                                                                 377 AGCCCATCTCTGTCTATGA 396
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  20 cerergaacgarrrrgacae 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               20 CTATGAAGAAGACCCTTCG 1
                                                                                                                                                                                                                                                 20 AGCCCATCTCCTGTCTATGA 1
                                                                                                                                                                      ô
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ORGANISM: Artificial Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TYPE: DNA
ORGANISM: Artificial Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Best Local Similarity 100.
Matches 20; Conservative
                                                                                                                                                                      Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 RESULT 140
US-10-160-786-15/c
                                                                                                                                                                                                                                                                                                                                   RESULT 139
US-10-160-786-14/c
                                                                                                                                                                        20;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TYPE: DNA
                                                                                                                                                                        Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  8
                                                                                                                                                                                                                                                               g
                                                                                                                                                                                                                      ઠે
```

```
Sequence 21, Application US/10160786
Publication No. US20030225013A1
Fublication No. US20030225013A1
GENERAL INFORMATION:
APPLICANT: Kenneth W. Dobie
TITLE OF INVENTION: ANTISENSE MODULATION OF PHOSPHOINOSITIDE-3-KINASE, REGULATORY SUBTITLE OF INVENTION: P150 EXPRESSION
FILE REFERENCE: RTS-0376
CURRENT APPLICATION NUMBER: US/10/160,786
CURRENT FILING DATE: 2002-05-31
NUMBER OF SEQ ID NOS: 147
LENGTH: 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      US-10-16.786-22/c
US-10-16.786-22/c
Sequence 22, Application US/10160786
Publication No. US20030225013A1
GENERAL INFORMATION:
APPLICANT: Susan M. Freier
APPLICANT: Kenneth W. Dobie
TITLE OF INVENTION: P150 EXPRESSION
CURRENT APPLICATION NUMBER: US/10/160,786
CURRENT APPLICATION NUMBER: US/10/160,786
CURRENT FILING DATE: 2002-05-31
NUMBER OF SEQ ID NOS: 147
LENGTH: 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            RESULT 148
US-10-160-786-23/C
Squarec 23, Application US/10160786
; Sequence 23, Application No. US2030225013A1
; Publication No. US2030225013A1
; GENERAL INFORMATION:
; APPLICANT: Susan M. Freier
; APPLICANT: Renneth W. Dobie
; TITLE OF INVENTION: ANTISENSE MODULATION OF PHOSPHOINOSITIDE-3-KINASE, REGULATORY SUBI
; TITLE OF INVENTION: P150 EXPRESSION
; TITLE OF INVENTION: P150 EXPRESSION
; CURRENT APPLICATION NUMBER: US/10/160,786
; CURRENT FILING DATE: 2002-05-31
; NUMBER OF SEQ ID NOS: 147
; SEQ ID NO 23
; LENGTH: 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  GapB
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Gapa
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  .
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Query Match

0.4%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 2.6e+02;
Matches 20; Conservative 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Query Match 0.4%; Score 20; DB 1; Length 20; Best Local Similarity 100.0%; Pred. No. 2.6e+02; Matches 20; Conservative 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                  ) OTHER INFORMATION: Antisense Oligonucleotide US-10-160-786-21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ; OTHER INFORMATION: Antisense Oligonucleotide US-10-160-786-22
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           780 GGAGGAACTGAAATCAGGC 799
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              824 CTTTCCAGAAGCATCAGAA 843
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            20 GGAGGAACTGAAAATCAGGC 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            20 CTTTCCAGAAAGCATCAGAA 1
                                                                                                                                                                                                                                                                                                                           TYPE: DNA
ORGANISM: Artificial Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TYPE: DNA
ORGANISM: Artificial Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ठ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ð
                                                                                                                                                                                                                                                                                                              Sequence 19, Application US/10160786
Publication No. US20030225013A1
GENERAL INFORMATION:
APPLICANT: Susan M. Freier
APPLICANT: Susan M. Freier
TITLE OF INVENTION: ANTISENSE MODULATION OF PHOSPHOINOSITIDE-3-KINASE, REGULATORY SUBTITLE OF INVENTION: PLSO EXPRESSION
FILE REFERENCE: RTS-0376
CURRENT APPLICATION NUMBER: US/10/160,786
CURRENT FILING DATE: 2002-05-31
NUMBER OF SEQ ID NOS: 147
SEQ ID NO 19
LENGTH: 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Sequence 20, Application US/10160786
Publication No. US20030225013A1
GENERAL INFORMATION:
APPLICANT: Susan M. Freier
APPLICANT: Kenneth W. Dobie
TITLE OF INVENTION: P150 EXPRESSION
FILE REPERENCE: RTS-0376
CURRENT APPLICATION NUMBER: US/10/160,786
CURRENT PILING DATE: 2002-05-31
NUMBER OF SEQ ID NOS: 147
SEQ ID NO 20
LENGTH: 20
                                                                                                      ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ö
                                                                                                      Gaps
                                                                                                      ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ô
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ö
                                                Query Match 0.4%; Score 20; DB 1; Length 20; Best Local Similarity 100.0%; Pred. No. 2.6e+02; Matches 20; Conservative 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Query Match

0.4%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 2.6e+02;
Matches 20; Conservative 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Query Match 0.4%; Score 20; DB 1; Length 20; Best Local Similarity 100.0%; Pred. No. 2.6e+02; Matches 20; Conservative 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ; FEATURE:
; OTHER INFORMATION: Antisense Oligonucleotide
US-10-160-786-19
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     OTHER INFORMATION: AntiBense Oligonucleotide US-10-160-786-20
                                                                                                                                                 631 GATATTCATGACTTTGAATA 650
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              703 CGAGAAGCCTGGTCGTTGT 722
                                                                                                                                                                                   20 GATATTCATGACTTTGAATA 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      20 CGAGAAGGCCTGGTCGTTGT 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TYPE: DNA
ORGANISM: Artificial Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TYPE: DNA ORGANISM: Artificial Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          RESULT 145
US-10-160-786-20/c
                                                                                                                                                                                                                                                                       RESULT 144
US-10-160-786-19/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       RESULT 146
US-10-160-786-21/c
  JS-10-160-786-18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   FEATURE:
                                                                                                                                                 ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ઠે
```

```
Sequence 26, Application US/10160786

Publication No. US20030225013A1

GENERAL INFORMATION:
GENERAL INFORMATION:
GENERAL INFORMATION:
APPLICANT: Susan M. Freier
APPLICANT: Kenneth W. Dobie
TITLE OF INVENTION: ANTISENSE MODULATION OF PHOSPHOINOSITIDE-3-KINASE, REGULATORY SUBLITILE REFERENCE: RTS-0376
CURRENT APPLICATION NUMBER: US/10/160,786
CURRENT APPLICATION NUMBER: US/10/160,786
CURRENT FILING DATE: 2002-05-31
NUMBER OF SEQ ID NOS: 147

SEQ ID NO 26
LENGTH: 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Sequence 27, Application US/10160786

Sequence 27, Application US/10160786

Sequence 27, Application No. US20030225013A1

Publication No. US20030225013A1

GENERAL INFORMATION:

APPLICANT: Kenneth W. Dobie

TITLE OF INVENTION: ANTISENSE MODULATION OF PHOSPHOINOSITIDE-3-KINASE, REGULATORY SUBITITLE OF INVENTION: P150 EXPRESSION

TITLE OF INVENTION: P150 EXPRESSION

TITLE OF INVENTION OF PHOSPHOLYCATION NUMBER: US/10/160,786

CURRENT APPLICATION NUMBER: US/10/160,786

CURRENT FILING DATE: 2002-05-31

SEQ ID NOS: 147

SEQ ID NO 27

LENGTH: 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Subjection US/10160786
| Publication No. US20030225013A1
| GENERAL INFORMATION:
| APPLICANT: Susan M. Freier
| APPLICANT: Kenneth W. Dobie
| TITLE OF INVENTION: ANTISENSE MODULATION OF PHOSPHOINOSITIDE-3-KINASE, REGULATORY SU-
| TITLE OF INVENTION: P150 EXPRESSION
| FILE REFERENCE: RTS-0376
| CURRENT APPLICATION NUMBER: US/10/160,786
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ô
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Length 20;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Length 20;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            0.4%; Score 20; DB 1; Le
100.0%; Pred. No. 2.6e+02;
tive 0; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Query Match
0.4%; Score 20; DB 1; L.
Best Local Similarity 100.0%; Pred. No. 2.6e+02;
Matches 20; Conservative 0; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ; OTHER INFORMATION: Antisense Oligonucleotide US-10-160-786-27
                                                                                                                                                                                                                                                                                                                                                                                                                                     , OTHER INFORMATION: Antisense Oligonucleotide US-10-160-786-26
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1032 GGTCACCAGTTGGAATTGGG 1051
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           998 TICGICATGGGGACATCAAG 1017
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           20 GGTCACCAGTTGGAATTGGG 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        20 TTCGTCATGGGGACATCAAG 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TYPE: DNA ORGANISM: Artificial Sequence
                                                                                                                                                                                                                                                                                                                                                                                  TYPE: DNA ORGANISM: Artificial Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    20; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Query Match
Best Local Similarity
Matches 20; Conserva
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   RESULT 153
US-10-160-786-28/c
                                                        US-10-160-786-26/c
                                                                                                                                                                                                                                                                                                                                                                                                                                   FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     RESULT 152
                                    RESULT 151
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sequence 25, Application US/10160786
Sequence 25, Application US/201301
Sequence 25, Application No. US20030225013A1
GENERAL INFORMATION
APPLICANT: Stand M. Freier
APPLICANT: Stand M. Dobie
TITLE OF INVENTION: ANTISENSE MODULATION OF PHOSPHOINOSITIDE-3-KINASE, REGULATORY SUF
TITLE OF INVENTION: PLO EXPRESSION
TITLE OF INVENTION: PLO EXPRESSION
TITLE OF LING DATE: 2002-05-31
NUMBER OF SEQ ID NOS: 147
SEQ ID NO 25
LENGTH: 20
                                                                                                                                                                                                                                                                                                                                                                      US-10-160-786-24/c
US-10-160-786-24/c
US-10-160-786-24/c
Sequence 24, Application US/10160786
PUBLICANT: Application No. US20030225013A1
GENERAL INFORMATION: Areaer
APPLICANT: Susan M. Freier
APPLICANT: Kenneth W. Dobie
TITLE OF INVENTION: P150 EXPRESSION
TITLE OF INVENTION: P150 EXPRESSION
FILE REFRENCE: RTS-0376
CURRENT APPLICATION NUMBER: US/10/160,786
CURRENT FILING DATE: 2002-05-31
NUMBER OF SEQ ID NOS: 147
SEQ ID NO S. 147
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ö
                                                                                                                                                                               ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Gaps
                                                                                                                                                                               Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                .;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ö
                                                                                                                                                                               ;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  DB 1; Length 20;
2.6e+02;
hes 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Query Match

0.4%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 2.6e+02;
Matches 20; Conservative 0; Mismatches 0; Indels
                                                                                                                                 Length 20;
                                                                                                                                                                               0; Indels
                                                                                                                                 Query Match
0.4%; Score 20; DB 1; Le
Best Local Similarity 100.0%; Pred. No. 2.6e+02;
Matches 20; Conservative 0; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    , OTHER INFORMATION: Antisense Oligonucleotide US-10-160-786-25
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Query Match 0.4%; Score 20; DB Best Local Similarity 100.0%; Pred. No. 2.6 Matches 20; Conservative 0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ; OTHER INFORMATION: Antisense Oligonucleotide US-10-160-786-24
                                                          ; OTHER INFORMATION: Antisense Oligonucleotide US-10-160-786-23
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 982 GCACACAAATCTGGAGTTCG 1001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              914 CCCGTCCATTCTTGAATAAC 933
                                                                                                                                                                                                                                  875 GGCAGTATGTGCGAGACAAT 894
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             20 GCACACAATCTGGAGTTCG 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            20 cccciccarrerranae 1
                                                                                                                                                                                                                                                        20 GGCAGTATGTGCGAGACAAT 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TYPE: DNA
ORGANISM: Artificial Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ORGANISM: Artificial Sequence
TYPE: DNA ORGANISM: Artificial Sequence FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ઠે
                                                                                                                                                                                                                                                                                g
                                                                                                                                                                                                                                         8
```

gibbs-10-667-022-4.rnpb

```
Sequence 31, Application US/10160786
Publication No. US20030225013A1
Publication No. US20030225013A1
Publication No. US20030255013A1
REBERAL INFORMATION:
APPLICANT: Kenneth W. Dobie
TITLE OF INVENTION: ANTISENSE MODULATION OF PHOSPHOINOSITIDE-3-KINASE, REGULATORY SUBITILIES OF INVENTION: P150 EXPRESSION
FILE REFERENCE: R75-0376
CURRENT APPLICATION NUMBER: US/10/160,786
CURRENT PILING DATE: 2002-05-31
NUMBER OF SEQ ID NOS: 147
SEQ ID NO 31
LENGTH: 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Sequence 32, Application US/10160786
Sequence 32, Application US/10160786
Publication No. US20030225013A1
GENERAL INFORMATION:
GENERAL INFORMATION:
APPLICANT: Susan M. Freier
APPLICANT: Susan M. Freier
APPLICANT: Susan M. Freier
APPLICANT: Susan M. Freier
APPLICANT: Susan M. Probie
TITLE OF INVENTION: P150 EXPRESSION
FILE REFERENCE: RTS-0376
CURRENT APPLICATION NUMBER: US/10/160,786
CURRENT PILING DATE: 2002-05-31
NUMBER OF SEQ ID NOS: 147
SEQ ID NO 32
LENGTH: 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Query Match 0.4%; Score 20; DB 1; Length 20; Best Local Similarity 100.0%; Pred. No. 2.6e+02; Matches 20; Conservative 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Length 20;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Indela
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Query Match
0.4%; Score 20; DB 1; Lv
Best Local Similarity 100.0%; Pred. No. 2.6e+02;
Matches 20; Conservative 0; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TYPE: DNA
ORGANISM: Artificial Sequence
FEATURE:
FORTURE:
JOTHER INFORMATION: Antisense Oligonucleotide
US-10-160-786-32
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               OTHER INFORMATION: Antisense Oligonucleotide
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1299 AGGTTGTGTGATAGCTGAGC 1318
                             1215 AGAICCTICAACTCCGCTIG 1234
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1268 AGTTGAAGAGAGCAATGGAC 1287
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Sequence 33, Application US/10160786; Publication No. US20030225013A1; GENERAL INFORMATION: APPLICANT: Susan M. Freier; APPLICANT: Kenneth W. Dobie
                                                                          20 AGATCCTTCAACTCCGCTTG 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   20 AGTTGAAGAGAGCAATGGAC 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            20 AGGTTGTGTGATAGCTGAGC 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TYPE: DNA ORGANISM: Artificial Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        RESULT 157
US-10-160-786-32/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        US-10-160-786-33/c
                                                                                                                                                                      US-10-160-786-31/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        US-10-160-786-31
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           FEATURE:
                                                                g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ઠે
                             à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              RESULT 155
US-10-160-786-30/C

i Sequence 30, Application US/10160786
i Publication No. US2030225013A1
i Publication No. US2030225013A1
i GENERAL INFORMATION:
i APPLICANT: Susan M. Preier
i APPLICANT: Susan M. Preier
i TITLE OF INVENTION: PISO EXPRESSION
i TITLE OF INVENTION: PISO EXPRESSION
i FILE REFERENCE: RTS-0376
i CURRENT APPLICATION NUMBER: US/10/160,786
i CURRENT ELLING DATE: 2002-05-31
i NUMBER OF SEQ ID NOS: 147
i SEQ ID NO 30
i SEQ ID NO 30
i SEQ ID NO 30
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Sequence 29, Application US/10160786
| Publication No. US20030225013A1
| GENERAL INFORMATION:
| APPLICANT: Susan M. Dobie
| TITLE OF INVENTION: PLSO EXPRESSION FILE REFERENCE: RTS-0376
| TITLE OF INVENTION: PLSO EXPRESSION FILE REFERENCE: RTS-0376
| CURRENT APPLICATION UNMBER: US/10/160,786
| CURRENT FILING DATE: 2002-05-31
| NUMBER OF SEQ ID NOS: 147
                                                                                                                                                                                                                                                                                        ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ö
                                                                                                                                                                                                                                                                                        ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         0.4%; Score 20; DB 1; Length 20;
100.0%; Pred. No. 2.6e+02;
tive 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Query Match 0.4%; Score 20; DB 1; Length 20; Best Local Similarity 100.0%; Pred. No. 2.6e+02; Matches 20; Conservative 0; Mismatches 0; Indels
                                                                                                                                                                                                                                       Query Match 0.4%; Score 20; DB 1; Length 20; Best Local Similarity 100.0%; Pred. No. 2.6e+02; Matches 20; Conservative 0; Mismatches 0; Indels
                                                                                                                                                                 ; OTHER INFORMATION: Antisense Oligonucleotide US-10-160-786-28
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ; OTHER INFORMATION: Antisense Oligonucleotide US-10-160-786-29
                                                                                                                                                                                                                                                                                                                                        1083 CACTTATCTTCCAGAGACA 1102
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1115 TCAATTATTTCTTTGACACA 1134
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           20 TCAATTATTTCTTTGACACA 1
                                                                                                                                                                                                                                                                                                                                                                                  20 cacriarcriccagaagaca 1
CURRENT FILING DATE: 2002-05-31 UNDBER OF SEQ ID NOS: 147 SEQ ID NO 28 LENGTH: 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TYPE: DNA
ORGANISM: Artificial Sequence
                                                                                              TYPE: DNA
ORGANISM: Artificial Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Best Local Similarity 100.
Matches 20; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                US-10-160-786-29/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  SEQ ID NO 29
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            요
                                                                                                                                                                                                                                                                                                                                        ò
```

```
RESULT 161
US-10-160-786-36/c
US-10-160-786-36/c
Application US/10160786
; Sequence 36, Application US/10160786
; Publication No. US2030225013A1
; GENERAL INFORMATION:
; APPLICANT: Susan M. Freier
; APPLICANT: Susan M. Probie
; TITLE OF INVENTION: ANTISENSE MODULATION OF PHOSPHOINOSITIDE-3-KINASE, REGULATORY SUBITION:
TITLE OF INVENTION: P150 EXPRESSION
; TITLE OF INVENTION: US-100 AND STEELS REFERENCE: RTS-0376
; CURRENT APPLICATION NUMBER: US/10/160,786
; CURRENT FILING DATE: 2002-05-31
; NUMBER OF SEQ ID NOS: 147
; SEQ ID NO 36
; LENGTH: 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Sequence 37, Application US/10160786
| Sequence 37, Application US/10160786
| Publication No. US20030225013A1
| Sequence 37, Application No. US20030225013A1
| Septicant No. US20030225013A1
| APPLICANT: Kenneth W. Dobie | TITLE OF INVENTION: PISO EXPRESSION | TITLE OF INVENTION: ANTISENSE MODULATION OF PHOSPHOINOSITIDE-3-KINASE, REGULATORY SUB | TITLE OF INVENTION: PISO EXPRESSION | TITLE OF INVENTION: NOWHER: US/10/160,786 | CURRENT APPLICATION NUMBER: US/10/160,786 | CURRENT FILING DATE: 2002-05-31 | NUMBER OF SEQ ID NOS: 147 | SEQ ID NOS: 147 | SEQ ID NOS: 1200-05-31 | SEQ ID NOS: 147 | SEQ ID NOS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ö
                                                                                     ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Gaps
                                                                                     Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      .
                                                                                     ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Length 20;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Length 20;
                   Query Match 0.4%; Score 20; DB 1; Length 20; Best Local Similarity 100.0%; Pred. No. 2.6e+02; Matches 20; Conservative 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        0.4%; Score 20; DB 1; Le
100.0%; Pred. No. 2.6e+02;
:ive 0; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Query Match
0.4%; Score 20; DB 1; Lv
Best Local Similarity 100.0%; Pred. No. 2.6e+02;
Matches 20; Conservative 0; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ; OTHER INFORMATION: Antisense Oligonucleotide US-10-160-786-37
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           , OTHER INFORMATION: Antisense Oligonucleotide US-10-160-786-36
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1513 TTTCCTGAATATTTTACAC 1532
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    RESULT 163
US-10-160-786-38/c
; Sequence 38, Application US/10160786
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1498 CAGCGTGGCAATGCCTTTCC 1517
                                                                                                                                                           1441 CAGATGATTCACCGTGAGCC 1460
                                                                                                                                                                                                                   20 cacarcarrcaccercacce 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TYPE: DNA ORGANISM: Artificial Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ORGANISM: Artificial Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Best_Local Similarity
Matches 20; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TYPE: DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ò
                                                                                                                                                                                                                          g
                                                                                                                                                                     ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Sequence 35, Application US/10160786
Publication No. US20030225013A1
GENERAL INFORMATION:
GENERAL INFORMATION:
APPLICANT: Nean M. Freier
APPLICANT: Kenneth W. Dobie
TITLE OF INVENTION: ANTISENSE MODULATION OF PHOSPHOINOSITIDE-3-KINASE, REGULATORY SUE
TITLE OF INVENTION: ANTISENSE MODULATION OF PHOSPHOINOSITIDE-3-KINASE, REGULATORY SUE
TITLE OF INVENTION: ANTISENSE MODULATION OF PHOSPHOINOSITIDE-3-KINASE, REGULATORY SUE
TITLE OF INVENTION: ANTISENSE NOT SECURED APPLICANTON NUMBER: US/10/160,786
CURRENT APPLICANTON NUMBER: US/10/160,786
CURRENT FILING DATE: 2002-05-31
NUMBER OF SEQ ID NOS: 147
SEQ ID NO 35
LENGTH: 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TITLE OF INVENTION: ANTISENSE MODULATION OF PHOSPHOINOSITIDE-3-KINASE, REGULATORY SUF
TITLE OF INVENTION: P150 EXPRESSION
FILE REFERENCE: RTS-0376
CURRENT APPLICATION UMBER: US/10/160,786
CURRENT FILING DATE: 2002-05-31
KUMBER OF SEQ ID NOS: 147
SEQ ID NO 33
LENGTH: 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       .
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     0.4%; Score 20; DB 1; Length 20; 100.0%; Pred. No. 2.6e+02; tive 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                    Query Match

0.4%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 2.6e+02;
Matches 20; Conservative 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     FEATURE:
, OTHER INFORMATION: Antisense Oligonucleotide
US-10-160-786-35
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ) OTHER INFORMATION: Antisense Oligonucleotide US-10-160-786-34
                                                                                                                                                                                                                                                                                                                                                 ; OTHER INFORMATION: Antisense Oligonuclectide US-10-160-786-33
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1414 GATCACAGTATCAGAGAATT 1433
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1337 CATTATTTGATCTCTCAA 1356
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 20 GATCACAGTATCAGAGAATT 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             20 CATTATTTGATCTCTCTCAA 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TYPE: DNA ORGANISM: Artificial Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TYPE: DNA ORGANISM: Artificial Sequence
                                                                                                                                                                                                                                                                     TYPE: DNA
ORGANISM: Artificial Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Query Match 0.4
Best Local Similarity 100.
Matches 20; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        RESULT 160
US-10-160-786-35/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    원
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ઠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ઠે
```

ô

Gaps

ô

```
Segon Do 41

Segon Do 41
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             US-10-160-786-42/c
US-10-160-786-42/c
US-10-160-786-42/c
Sequence 42, Application US/10160786
PUBLICARIAN NO. US20030225013A1
GENERAL INFORMATION:
APPLICANT: Susan M. Freier
APPLICANT: Kenneth W. Dobie
TITLE OF INVENTION: P150 EXPRESSION
TITLE OF INVENTION: P150 EXPRESSION
TITLE OF INVENTION: P150 EXPRESSION
CURRENT APPLICATION NUMBER: US/10/160,786
CURRENT FILING DATE: 2002-05-31
NUMBER OF SEQ ID NOS: 147
SEQ ID NO 42
LENGTH: 20
                                                                                                                    Query Match 0.4%; Score 20; DB 1; Length 20; Best Local Similarity 100.0%; Pred. No. 2.6e+02; Matches 20; Conservative 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Query Match 0.4%; Score 20; DB 1; Length 20; Best Local Similarity 100.0%; Pred. No. 2.6e+02; Matches 20; Conservative 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Length 20;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Indele
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Ouery Match
0.4%; Score 20; DB 1; Le
Best Local Similarity 100.0%; Pred. No. 2.6e+02;
Matches 20; Conservative 0; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       FEATURE:

COTHER INFORMATION: Antisense Oligonucleotide
US-10-160-786-41
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ; OTHER INFORMATION: Antisense Oligonucleotide US-10-160-786-42
                                                    ) OTHER INFORMATION: AntiBense Oligonucleotide US-10-160-786-40
                                                                                                                                                                                                                 1658 AAAAAGCCGAAGGAGAGCCT 1677
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1706 CTGTTATAACATCCTGCCTA 1725
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1978 GCCCAAGATGATGCTACTAT 1997
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         20 CTGTTATAACATCCTGCCTA 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    20 GCCCAAGATGATGCTACTAT 1
       ORGANISM: Artificial Sequence FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TYPE: DNA ORGANISM: Artificial Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ORGANISM: Artificial Sequence
                                                                                                                                                                                                                                                                                                                            RESULT 166
US-10-160-786-41/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TYPE: DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Best Loca
Matches
                                                                                                                                                                                                                                                          D.
                                                                                                                                                                                                                 ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          RESULT 164
US-10-160-786-39/C

Sequence 39, Application US/10160786

Publication No. US20303225013A1

REBERL INFORMATION:
APPLICANT: Susan M. Preier
APPLICANT: Susan M. Preier
TITLE OF INVENTION: ANTISENSE MODULATION OF PHOSPHOINOSITIDE-3-KINASE, REGULATORY SUB
TITLE OF INVENTION: P150 EXPRESSION
FILE REFERENCE: RTS-0376
CURRENT PTLLING DATE: 2002-05-31
NUMBER OF SEQ ID NOS: 147

SEQ ID NO 39

1.RNGTH: 20
Publication No. US20030225013A1
GENERAL INFORMATION:
APPLICANT: Sugan M. Fraier
APPLICANT: Sugan M. Fraier
APPLICANT: Sugan M. Evaier
TITLE OF INVENTION: P150 EXPRESSION
FILE REFERENCE: RTS-0376
CURRENT APPLICATION NUMBER: US/10/160,786
CURRENT PILING DATE: 2002-05-31
SEQ ID NOS: 147
SEQ ID NO 38
LENGTH: 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     RESULT 165
US-10-160-786-40/c
US-10-160-786-40/c
Sequence 40, Application US/10160786
Publication No. US20030225013A1
GENERAL INFORMATION:
APPLICANT: Susan M. Freier
APPLICANT: Susan M. Freier
APPLICANT: Susan M. Freier
TITLE OF INVENTION: P150 EXPRESSION
FILE REFERENCE: RTS-0376
CURRENT APPLICATION WHMBER: US/10/160,786
CURRENT FILING DAIE: 2002-05-31
NUMBER OF SEQ ID NOS: 147
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ö
                                                                                                                                                                                                                                                                                                                                                                                                                     Query Match 0.4%; Score 20; DB 1; Length 20; Best Local Similarity 100.0%; Pred. No. 2.6e+02; Matches 20; Conservative 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    0.4%; Score 20; DB 1; Length 20; 100.0%; Pred. No. 2.6e+02;
                                                                                                                                                                                                                                                                                                                                                  ; OTHER INFORMATION: AntiBenge Oligonucleotide US-10-160-786-38
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                100.0%; Prea. ...
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1630 CACAATCTCTGTGGACATGA 1649
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            20 ACACTTTTCTTCAGCCCTAC 1
                                                                                                                                                                                                                                                                               TYPE: DNA
ORGANISM: Artificial Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  20; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Best Local Similarity
Matches 20; Conserva
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             SEQ ID NO 40
LENGTH: 20
TYPE: DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            d
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       g
```

ö

Gapa

ö

ö

Gaps

```
MS-10-160-786-46/c
| Sequence 46, Application US/10160786
| Sequence 46, Application US/20030225013A1
| Publication No. US20030225013A1
| GENERAL INFORMATION:
| APPLICANT: Susan M. Freier
| APPLICANT: Susan M. Dobis
| TITLE OF INVENTION: ANTISENSE MODULATION OF PHOSPHOINOSITIDE-3-KINASE, REGULATORY SUBL. TITLE OF INVENTION: P150 EXPRESSION
| TITLE OF INVENTION: P150 EXPRESSION
| TITLE OF INVENTION: US/10/160,786
| CURRENT APPLICATION NUMBER: US/10/160,786
| CURRENT FILING DATE: 2002-05-31
| NUMBER OF SEQ ID NOS: 147
| SEQ ID NO 46
| LENGTH: 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Sequence 47, Application US/10160786
| Sequence 47, Application US/10160786
| Publication No. US20030225013A1
| Greation No. US20030225013A1
| Greation No. US20030225013A1
| Greation No. US20030225013A1
| APPLICANT: Susan M. Freier
| APPLICANT: Susan M. Freier
| APPLICANT: Susan M. Freier
| TITLE OF INVENTION: PL50 EXPRESSION | FILE REFRENCE: RTS-0376
| FILE REFERENCE: RTS-0376
| CURRENT APPLICATION NUMBER: US/10/160,786
| CURRENT FILING DATE: 2002-05-31
| NUMBER OF SEQ ID NOS: 147
| SEQ ID NO 47
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ö
                                                                                                                                                                                                                                                                                                                                                                                          ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Gaps
                                                                                                                                                                                                                                                                                                                                                                                              Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ;
                                                                                                                                                                                                                                                                                                                                                                                              .;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Query Match 0.4%; Score 20; DB 1; Length 20; Best Local Similarity 100.0%; Pred. No. 2.6e+02; Matches 20; Conservative 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Length 20;
                                                                                                                                                                                                                                                                                                                       Length 20;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               0; Indels
                                                                                                                                                                                                                                                                                                                                                                                          0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Query Match
0.4%; Score 20; DB 1; Le
Best Local Similarity 100.0%; Pred. No. 2.6e+02;
Matches 20; Conservative 0; Mismatches 0;
                                                                                                                                                                                                                                                                                                                Query Match
0.4%; Score 20; DB 1; Li
Best Local Similarity 100.0%; Pred. No. 2.6e+02;
Matches 20; Conservative 0; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 , OTHER INFORMATION: Antisense Oligonucleotide US-10-160-786-47
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           OTHER INFORMATION: Antisense Oligonucleotide
                                                                                                                                                                                                 , OTHER INFORMATION: Antisense Oligonucleotide US-10-160-786-45
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         2131 CCAAATGGAAATTATGACAC 2150
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        2080 CTTAATATGGAAAATGACCC 2099
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            20 ccaaarggaaarrargacac 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          20 CTTAATATGGAAAATGACCC 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TYPE: DNA
ORGANISM: Artificial Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ORGANISM: Artificial Sequence
                                                                                                                                                    ORGANISM: Artificial Sequence
NUMBER OF SEQ ID NOS: 147
SEQ ID NO 45
LENGTH: 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                US-10-160-786-46
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              LENGTH: 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TYPE: DNA
                                                                                                                          TYPE: DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     FEATURE:
                                                                                                                                                                                             FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  엄
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            RESULT 170

US-10-160-786-45/c

US-10-160-786-45/c

Sequence 45, Application US/10160786

Publication No. US20030225013A1

GENERAL INFORMATION:
APPLICANT: Kenneth W. Dobie
TITLE OF INVENTION: P150 EXPRESSION
TITLE OF INVENTION: P150 EXPRESSION
FILE REFERENCE: RTS-0376
CURRENT APPLICATION NUMBER: US/10/160,786

CURRENT FILING DATE: 2002-05-31
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Sequence 44, Application US/10160786

Publication No. US20030225013A1

GENERAL INFORMATION:
APPLICANT: Susan M. Freier
APPLICANT: Kenneth W. Dobie
TITLE OF INVENTION: P150 EXPRESSION
TITLE OF INVENTION
                                                           RESULT 168

US-10-160-786-43/c

US-10-160-786-43/c

Sequence 43, Application US/10160786

Publication No. US20030225013A1

GENERAL INFORMATION:
APPLICANT: Suan M. Freier
APPLICANT: Kenneth W. Dobie
TITLE OF INVENTION: ANTISENSE MODULATION OF PHOSPHOINOSITIDE-3-KINASE, REGULATORY SUBTITLE OF INVENTION: AND EXPRESSION
TITLE OF INVENTION: ANTISENSE WOULATION OF PHOSPHOINOSITIDE-3-KINASE, REGULATORY SUBTITLE OF INVENTION: NUMBER: US/10/160,786
CURRENT APPLICATION NUMBER: US/10/160,786
CURRENT FILING DATE: 2002-05-31
NUMBER OF SEQ ID NOS: 147

LENGTH: 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ..
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Length 20;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Query Match 0.4%; Score 20; DB 1; Length 20; Best Local Similarity 100.0%; Pred. No. 2.6e+02; Matches 20; Conservative 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Query Match
0.4%; Score 20; DB 1; Li
Best Local Similarity 100.0%; Pred. No. 2.6e+02;
Matches 20; Conservative 0; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ), OTHER INFORMATION: Antisense Oligonucleotide US-10-160-786-44
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       , OTHER INFORMATION: Antisense Oligonucleotide US-10-160-786-43
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             2041 ACAGCTCTGAGATTCCTGGA 2060
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        2005 CTAGCCTATGCTGAAACAT 2024
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                20 ACAGCTCTGAGATTCCTGGA 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           20 craeccrarecreaaacar 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TYPE: DNA ORGANISM: Artificial Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TYPE: DNA
ORGANISM: Artificial Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              RESULT 169
US-10-160-786-44/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 FEATURE:
```

ઠે

ઠે 셤

```
APPLICANT: Kenneth W. Dobie
TITLE OF INVENTION: ANTISENSE MODULATION OF PHOSPHOINOSITIDE-3-KINASE, REGULATORY SUBI
TITLE OF INVENTION: P150 EXPRESSION
FILE REFERENCE: RTS-0376
CURRENT APPLICATION NUMBER: US/10/160,786
CURRENT FILING DATE: 2002-05-31
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Sequence 52, Application US/10160786
Publication No. US20030225013A1
GENERAL INFORMATION:
GENERAL INFORMATION:
GENERAL INFORMATION:
TAPLICANT: Susan M. Freier
APPLICANT: Kenneth W. Dobie
TITLE OF INVENTION: ANTISENSE MODULATION OF PHOSPHOINOSITIDE-3-KINASE, REGULATORY SUBITITIES OF INVENTION: PISO EXPRESSION
FILE REFERENCE: RTS-0376
CURRENT APPLICATION NUMBER: US/10/160,786
CURRENT FILING DATE: 2002-05-31
NUMBER OF SEQ ID NOS: 147
SEQ ID NO 52
LENGTH: 20
                                                                                                                                                                                                                                                                                                                                  ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ö
                                                                                                                                                                                                                                                                                                                                Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Gapa
                                                                                                                                                                                                                                                                                                                                  ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Length 20;
                                                                                                                                                                                                                                                                                         Length 20;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              0; Indels
                                                                                                                                                                                                                                                                                     Query Match
0.4%; Score 20; DB 1; L
Best Local Similarity 100.0%; Pred. No. 2.6e+02;
Matches 20; Conservative 0; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Query Match
0.4%; Score 20; DB 1; L.
Best Local Similarity 100.0%; Pred. No. 2.6e+02;
Matches 20; Conservative 0; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ; OTHER INFORMATION: Antisense Oligonucleotide US-10-160-786-51
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ; OTHER INFORMATION: Antisense Oligonucleotide US-10-160-786-52
                                                                                                                                                                                                                     ; OTHER INFORMATION: Antisense Oligonucleotide US-10-160-786-50
TITLE OF INVENTION: P150 EXPRESSION FILE REPERSENCE: RTS-0376 CURRENT APPLICATION NUMBER: US/10/160,786 CURRENT FILING DATE: 2002-05-31 NUMBER OF SEQ ID NOS: 147 SEQ ID NO 50 LENGTH: 20
                                                                                                                                                                                                                                                                                                                                                                         2555 TCCTGTGTCATCCCAATITA 2574
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         2587 GGTGCCGTGGGATTTATCAC 2606
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Sequence 51, Application US/10160786 Publication No. US/0030225013A1 GENERAL INFORMATION: APPLICANT: Susan M. Freier
                                                                                                                                                                                                                                                                                                                                                                                                             20 TCCTGTGTCATCCCAATTTA 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  20 GGTGCCGTGGGATTTATCAC 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    NUMBER OF SEQ ID NOS: 147
SEQ ID NO 51
LENGTH: 20
                                                                                                                                                   TYPE: DNA
ORGANISM: Artificial Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TYPE: DNA ORGANISM: Artificial Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TYPE: DNA ORGANISM: Artificial Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   RESULT 176
US-10-160-786-51/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          US-10-160-786-52/c
                                                                                                                                                                                                 FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             FEATURE:
                                                                                                                                                                                                                                                                                                                                                                             ઠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    RESULT 174

US-10-160-786-49/c

US-10-160-786-49/c

Sequence 49, Application US/10160786

Publication No. US20030225013A1

GENERAL INFORMATION:
APPLICANT: Susan M. Freier
APPLICANT: Susan M. Preier
APPLICANT: Remeth M. Dobie
TITLE OF INVENTION: ANTISENSE MODULATION OF PHOSPHOINOSITIDE-3-KINASE, REGULATORY SUB
TITLE OF INVENTION: P150 EXPRESSION
FILE REFERENCE: RTS-0376
CURRENT APPLICATION NUMBER: US/10/160,786
CURRENT FILING DATE: 2002-05-31
NUMBER OF SEQ ID NOS: 147

SEQ ID NO 49

LENGTH: 20
                                                                                                                                            Sequence 48, Application US/10160786
Publication No. US20030225013A1
GENERAL INFORMATION:
APPLICANT: Susan M. Freier
APPLICANT: Kenneth W. Dobie
TITLE OF INVENTION: PISO EXPRESSION
FILE REFERENCE: RTS-0376
CURRENT FILING DATE: 2002-05-31
NUMBER OF SEQ ID NOS: 147
SEQ ID NO 48
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          APPLICANT: Susan M. Freier
APPLICANT: Kenneth W. Dobie
TITLE OF INVENTION: ANTISENSE MODULATION OF PHOSPHOINOSITIDE-3-KINASE, REGULATORY SUB
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Gape
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   0.4%; Score 20; DB 1; Length 20;
100.0%; Pred. No. 2.6e+02;
tive 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      0.4%; Score 20; DB 1; Length 20;
100.0%; Pred. No. 2.6e+02;
ive 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      OTHER INFORMATION: AntiBense Oligonucleotide
  2391 TGCTGGCAAAGCTCCTCAA 2410
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              2438 TTAGTGATGCTGAGGAATTT 2457
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              2524 GTTTACGAATTTGCCAGTGA 2543
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  RESULT 175
US-10-160-786-50/c
; Sequence 50, Application US/10160786
; Publication No. US20030225013A1
; GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       20 TTAGTGATGCTGAGGAATTT 1
                                             TGGCTGGCAAAGCTCCTCAA 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       20 GTTTACGAATTTGCCAGTGA
                                                                                                                                                                                                                                                                                                                                                                                                                                        TYPE: DNA ORGANISM: Artificial Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Query Match
Best Local Similarity 100.0
Matches 20, Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Query Match
Best Local Similarity 100.
Matches 20; Conservative
                                                                                                          RESULT 173
US-10-160-786-48/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            US-10-160-786-48
                                           20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      FEATURE:
                                        셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       쉽
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                g
  ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ઠે
```

ઠે

```
GENERAL INFORMATION:
APPLICANT: Susan M. Freier
APPLICANT: Susan M. Dobie
APPLICANT: Kenneth W. Dobie
TITLE OF INVENTION: ANTISENSE MODULATION OF PHOSPHOINOSITIDE-3-KINASE, REGULATORY SUBL.
TITLE OF INVENTION: P150 EXPRESSION
TITLE OF INVENTION: P150 EXPRESSION
GURRENT APPLICATION NUMBER: US/10/160,786
CURRENT APPLICATION NUMBER: US/10/160,786
CURRENT FILING DATE: 2002-05-31
SNG ID NO 55
LENGTH: 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Sequence 56, Application US/10160786

Sequence 56, Application US/10160786

Publication Vo. US20030225013A1

GENERAL INFORMATION:
APPLICANT: Susan M. Freier
APPLICANT: Kenneth W. Dobie
TITLE OF INVENTION: P150 EXPRESSION
TITLE OF INVENTION: P150 EXPRESSION
TITLE OF INVENTION: NUMBER: US/10/160,786
CURRENT APPLICATION NUMBER: US/10/160,786
CURRENT FILING DATE: 2002-05-31
NUMBER OF SEQ ID NOS: 147

LENGTH: 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  RESULT 182
US-10-160-786-57/c
US-10-160-786-57/c
Sequence 57, Application US/10160786
Publication No. US20030225013A1
GENERAL INFORMATION:
GENERAL INFORMATION:
APPLICANT: Kenneth W. Dobie
TITLE OF INVENTION: ANTISENSE MODULATION OF PHOSPHOINOSITIDE-3-KINASE, REGULATORY SUBTITLE OF INVENTION: PL50 EXPRESSION
TITLE OF INVENTION: TRS-0376
CURRENT APPLICATION NUMBER: US/10/160,786
CURRENT FILING DATE: 2002-05-31
NUMBER OF SEQ ID NOS: 147
SEQ ID NO 57
LENGTH: 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                           ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                           Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             .
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                           ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           0.4%; Score 20; DB 1; Length 20;
100.0%; Pred. No. 2.6e+02;
tive 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                              Length 20;
                                                                                                                                                                                                                                                                                                                                                                                                                                                              Indels
                                                                                                                                                                                                                                                                                                                                                                                                            Query Match
0.4%; Score 20; DB 1; L.
Best Local Similarity 100.0%; Pred. No. 2.6e+02;
Matches 20; Conservative 0; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ; OTHER INFORMATION: Antisense Oligonucleotide US-10-160-786-56
                                                                                                                                                                                                                                                                                                                            ; OTHER INFORMATION: Antisense Oligonucleotide
US-10-160-786-55
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  3009 TCAGAAAGGTGTAATTGACT 3028
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               2913 AGAGGAAGACAAACTTCTGG 2932
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       20 TCAGAAAGGTGTAATTGACT 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          20 AGAGGAAGACAAACTTCTGG 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TYPE: DNA ORGANISM: Artificial Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TYPE: DNA ORGANISM: Artificial Sequence
                                                                                                                                                                                                                                                                               TYPE: DNA ORGANISM: Artificial Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Query Match
Best Local Similarity
Matches 20; Conserv
                                                                                                                                                                                                                                                                                                                         FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       GENERAL INFORMATION:
GENERAL INFORMATION:
APPLICANT: Susan M. Freier
APPLICANT: Kenneth W. Dobie
TITLE OF INVENTION: ANTIERNER MODULATION OF PHOSPHOINOSITIDE-3-KINASE, REGULATORY SUE
TITLE OF INVENTION: PLSO EXPRESSION
FILE REFERENCE: RTS-0376
CURRENT APPLICATION NUMBER: US/10/160,786
CURRENT PILING DATE: 2002-05-31
NUMBER OF SEQ ID NOS: 147
SEQ ID NO 54
LENGTH: 20
                                                                                                                                                                                                                                     RESULT 178

US-10-160-786-53/C

US-10-160-786-53/C

Sequence 53, Application US/10160786

Publication No. US20030225013A1

GENERAL INFORMATION:
APPLICANT: Suban M. Freier
APPLICANT: Kenneth W. Dobie
TITLE OF INVENTION: ANTISENSE MODULATION OF PHOSPHOINOSITIDE-3-KINASE, REGULATORY SUBTITLE OF INVENTION: P150 EXPRESSION
FILE REFERENCE: RTG-0376
CURRENT APPLICATION NUMBER: US/10/160,786
CURRENT FILING DATE: 2002-05-31
NUMBER OF SEQ ID NOS: 147
SEQ ID NO 53
LENGTH: 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ö
                                                                     ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Gaps
                                                                     Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ..
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ö
                                                                     ;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Query Match

0.4%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 2.6e+02;
Matches 20; Conservative 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Query Match

0.4%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 2.6e+02;
Matches 20; Conservative 0; Mismatches 0; Indels
                 ch 0.4%; Score 20; DB 1; Length 20; 1 Similarity 100.0%; Pred. No. 2.6e+02; 20; Conservative 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      FEATURE:
, OTHER INFORMATION: Antisense Oligonucleotide US-10-160-786-54
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ; OTHER INFORMATION: Antisense Oligonucleotide
US-10-160-786-53
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         2860 CCTGCCATAGCACAGCTTCT 2879
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       2843 GCCCTCCGCCAGAGGATCCT 2862
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Sequence 55, Application US/10160786; Publication No. US20030225013A1
                                                                                                                     2731 GAACCAGTAAGTCGTTCTAT 2750
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  US-10-160-786-54/c
; Sequence 54, Application US/10160786
; Publication No. US20030225013A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    20 CCTGCCATAGCACAGCTTCT 1
                                                                                                                                                                    20 GAACCAGTAAGTCGTTCTAT 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     20 GCCTCCGCCAGAGGATCCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ORGANISM: Artificial Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TYPE: DNA
ORGANISM: Artificial Sequence
                      Query Match
Best Local Similarity
Matches 20; Conserva
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 RESULT 180
US-10-160-786-55/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TYPE: DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ò
                                                                                                                               ò
```

```
18-10-160-786-60/c
| Sequence 60, Application US/10160786
| Sequence 60, Application US/10160786
| Publication No. US20030225013A1
| GENERAL INFORMATION:
| APPLICANT: Susan M. Freier
| APPLICANT: Kenneth W. Dobie
| TITLE OF INVENTION: ANTIERNSE MODULATION OF PHOSPHOINOSITIDE-3-KINASE, REGULATORY SUBITILE OF INVENTION: P150 EXPRESSION
| TITLE OF INVENTION: P150 EXPRESSION
| TITLE OF INVENTION: P150 EXPRESSION
| CURRENT APPLICATION NUMBER: US/10/160,786
| CURRENT PILING DATE: 2002-05-31
| SEQ ID NO 60
| SEQ ID NO 60
| LENGTH: 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Sequence 61, Application US/10160786

Fortication No. US2030225013A1

GENERAL INFORMATION:
GENERAL INFORMATION:
GENERAL INFORMATION:
TAPLICANT: Susan M. Freier
APPLICANT: Seane M. Dobie
TITLE OF INVENTION: ANTISENSE MODULATION OF PHOSPHOINOSITIDE-3-KINASE, REGULATORY SUBITITLE OF INVENTION: P150 EXPRESSION
FILE REPERENCE: RTS-0376
CURRENT APPLICATION NUMBER: US/10/160,786
CURRENT FILING DATE: 2002-05-31
NUMBER OF SEQ ID NOS: 147

SEQ ID NO 61
LENGTH: 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 18-10-160-786-62/c
| Sequence 62, Application US/10160786
| Sequence 62, Application US/10160786
| Publication No. US20030225013A1
| GENERAL INFORMATION:
| APPLICANT: Susan M. Freier
| APPLICANT: Kenneth W. Dobie
| TITLE OF INVENTION: ANTISENSE MODULATION OF PHOSPHOINOSITIDE-3-KINASE, REGULATORY GUBI
| TITLE OF INVENTION: P150 EXPRESSION
| FILE REFERENCE: RTS-0376
| CURRENT APPLICATION UNMBER: US/10/160,786
| CURRENT PILING DATE: 2002-05-31
| NUMBER OF SEQ ID NOS: 147
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Query Match 0.4%; Score 20; DB 1; Length 20; Best Local Similarity 100.0%; Pred. No. 2.6e+02; Matches 20; Conservative 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Query Match 0.4%; Score 20; DB 1; Length 20; Best Local Similarity 100.0%; Pred. No. 2.6e+02; Matches 20; Conservative 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ; OTHER INFORMATION: Antisense Oligonucleotide US-10-160-786-60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         , OTHER INFORMATION: Antisense Oligonucleotide US-10-160-786-61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               3341 GTAGTACAATCTTACCATCC 3360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               3388 AAAACTGAACTTCAGCAACT 3407
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             20 Gradracaarcriaccarcc 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 20 AAAACTGAACTTCAGCAACT 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TYPE: DNA ORGANISM: Artificial Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ORGANISM: Artificial Sequence FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            US-10-160-786-61/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TYPE: DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             RESULT 184

US-10-160-786-59/C

Sequence 59, Application US/10160786

Publication No. US2000225013A1

SEQUENCE SEGUENCE SEGUENCE

APPLICANT: Susan M. Freier

APPLICANT: Kenneth W. Dobie

TITLE OF INVENTION: ANTISENSE MODULATION OF PHOSPHOINOSITIDE-3-KINASE, REGULATORY SUE

TITLE OF INVENTION: P150 EXPRESSION

FILE REFERENCE: RTS-0376

CURRENT PILING DATE: 202-05-31

NUMBER OF SEQ ID NOS: 147

LENGTH: 20

LENGTH: 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                   RESULT 183
US-10-160-786-58/C
US-10-160-786-58/C
Sequence 59, Application US/10160786
Publication No. US20030225013A1
GENERAL INFORMATION:
GENERAL INFORMATION:
APPLICANT: Neaneth W. Dobie
TITLE OF INVENTION:
TITLE OF INVENTION
                                                                                                                                                                                                                    ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ö
                                                                                                                                                                                                                    Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ;
0
                                                                                                                                                                                                                    ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       0.4%; Score 20; DB 1; Length 20;
100.0%; Pred. No. 2.6e+02;
iive 0; Mismatches 0; Indels
                                                                                                                                              Length 20;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Length 20;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Indels
                                                                                                                                       Query Match
0.4%; Score 20; DB 1; L. Best Local Similarity 100.0%; Pred. No. 2.6e+02; Matches 20; Conservative 0; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Query Match
0.4%; Score 20; DB 1; Lo
Best Local Similarity 100.0%; Pred. No. 2.6e+02;
Matches 20; Conservative 0; Mismatches 0;
; FEATURE:
; OTHER INFORMATION: Antisense Oligonucleotide
US-10-160-786-57
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     OTHER INFORMATION: Antisense Oligonucleotide
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      3250 TCTGCTGGCATTTGTGTCCC 3269
                                                                                                                                                                                                                                                                                  3057 AGTTGATCTTGTTAAAACCA 3076
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              3318 AAAACCAGTAATACCGGTTT 3337
                                                                                                                                                                                                                                                                                                                      20 AGTTGATCTTGTTAAAACCA 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  20 TCTGCTGGCATTTGTGTCCC 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        20 AAAAccaGraAraccGGrrr 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TYPE: DNA
ORGANISM: Artificial Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Best Local Similarity 100. Matches 20; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         US-10-160-786-58
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Query Match
                                                                                                                                                                                                                                                                                                                                                ద
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 요
                                                                                                                                                                                                                                                                                  ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ઠ
```

```
APPLICANT: Sugan M. Freier
APPLICANT: Sugan M. Freier
APPLICANT: Sugan M. Preier
APPLICANT: Kenneth W. Dobie
TITLE OF INVENTION: PAISOERRESSION
TITLE OF INVENTION: PLSO EXPRESSION
FILE REFRENCE: RTS-0376
CURRENT APPLICATION UNDER: US/10/160,786
CURRENT FILING DATE: 2002-05-31
NUMBER OF SEQ ID NOS: 147
SEQ ID NO 65
LENGTH: 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          US-10-160-786-66/C

Sequence 66, Application US/10160786

Publication No. US20030225013A1

GENERAL INFORMATION:
APPLICANT: Susan M. Freier
APPLICANT: Kenneth W. Dobie
TITLE OF INVENTION: P150 EXPRESSION
TITLE OF INVENTION WIMBER: US/10/160,786
CURRENT FILING DATE: 2002-05-31
SEQ ID NO 66
IENGTH: 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Sequence 67, Application US/10160786;
Publication No. US20030225013A1
GENERAL INFORMATION:
APPLICANT: Susan M. Freier
APPLICANT: Kenneth W. Dobie
ITILE OF INVENTION: ANTISENSE MODULATION OF PHOSPHOINOSITIDE-3-KINASE, REGULATORY SUBI
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Query Match 0.4%; Score 20; DB 1; Length 20; Best Local Similarity 100.0%; Pred. No. 2.6e+02; Matches 20; Conservative 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      0.4%; Score 20; DB 1; Length 20; 100.0%; Pred. No. 2.6e+02; tive 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ; OTHER INFORMATION: Antisense Oligonucleotide US-10-160-786-65
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ; OTHER INFORMATION: Antisense Oligonucleotide US-10-160-786-66
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              3523 GTTGCCCATCTTCATGAGCA 3542
                                                                                                                                                   ; Sequence 65, Application US/10160786; Publication No. US20030225013A1; GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            3555 GAATCGAATTAGAGTCTCTG 3574
                20 GCGTCCTAAAGGGCTGTTAG 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      20 Gridcecarcricardadea 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      20 GAATCGAATTAGAGTCTCTG 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                  TYPE: DNA
ORGANISM: Artificial Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TYPE: DNA
ORGANISM: Artificial Sequence
FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Query Match
Best Local Similarity 100.0
Matches 20; Conservative
                                                                                                                                US-10-160-786-65/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     RESULT 192
US-10-160-786-67/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           RESULT 191
                                      셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           APPLICANT: Susan M. Freier
APPLICANT: Susan M. Dobie
APPLICANT: Susan M. Dobie
TITLE OF INVENTION: P150 EXPRESSION
TITLE OF INVENTION: P150 EXPRESSION
FILE REPRESENCE: RTG-0376
CURRENT APPLICATION NUMBER: US/10/160,786
CURRENT PILING DATE: 2002-05-31
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Sequence 64, Application US/10160786
Publication No. US20030225013A1
APPLICANT: Susan M. Freier
APPLICANT: Susan M. Freier
APPLICANT: Kenneth M. Dobie
TITLE OF INVENTION: P150 EXPRESSION
FILE REPRENCE: RTS-0376
CURRENT APPLICATION NUMBER: US/10/160,786
CURRENT FILING DATE: 2002-05-31
NUMBER OF SEQ ID NOS: 147
EIGNGTH: 20
                                                                                                                                                                                                                                         ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ö
                                                                                                                                                                                                                                       Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Gaps
                                                                                                                                                                                                                                         ;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        .
0
                                                                                                                                                                                          Length 20;
                                                                                                                                                                                                                                     0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Query Match

O.4%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 2.6e+02;
Matches 20; Conservative 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Query Match 0.4%; Score 20; DB 1; Length 20; Best Local Similarity 100.0%; Pred. No. 2.6e+02; Matches 20; Conservative 0; Mismatches 0; Indels
                                                                                                                                                                                Query Match 0.4%; Score 20; DB 1; Lu Best Local Similarity 100.0%; Pred. No. 2.6e+02; Matches 20; Conservative 0; Mismatches 0;
                                                                                   FEATURE:

CTHER INFORMATION: Antisense Oligonucleotide

US-10-160-786-62
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ; OTHER INFORMATION: Antisense Oligonucleotide
US-10-160-786-63
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ; OTHER INFORMATION: Antisense Oligonucleotide
US-10-160-786-64
                                                                                                                                                                                                                                                                        3431 GCAATGCTGAGAGAATAGCT 3450
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       3455 AGATGATGGAAAATGCTGAA 3474
                                                                                                                                                                                                                                                                                                                                                                                                                                 Sequence 63, Application US/10160786
Publication No. US20030225013A1
GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         3504 GCGTCCTAAAGGGCTGTTAG 3523
                                                                                                                                                                                                                                                                                                       20 GCAATGCTGAGAGAATAGCT 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   20 AGATGATGGAAAATGCTGAA 1
                                        TYPE: DNA
ORGANISM: Artificial Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TYPE: DNA
ORGANISM: Artificial Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TYPE: DNA
ORGANISM: Artificial Sequence
                                                                                                                                                                                                                                                                                                                                                                                                              US-10-160-786-63/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       RESULT 189
US-10-160-786-64/C
SEQ ID NO 62
LENGTH: 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         FEATURE:
                                                                                                                                                                                                                                                                        ઠે
                                                                                                                                                                                                                                                                                                                 d
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ò
```

gibbs-10-667-022-4.rnpb

```
Sequence 70, Application US/10160786

Publication No. US20030225013A1

GENERAL INFORMATION:
GENERAL INFORMATION:
TAPLICANT: Steam M. Freier
TITLE OF INVENTION: ANTISENSE MODULATION OF PHOSPHOINOSITIDE-3-KINASE, REGULATORY SUBITILES REFERENCE: RTS-0376
CURRENT APPLICANTON: P150 EXPRESSION
FILE REFERENCE: RTS-0376
CURRENT APPLICATION NUMBER: US/10/160,786
CURRENT FILING DATE: 2002-05-31
NUMBER OF SEQ ID NOS: 147

SEQ ID NO 70
LENGTH: 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Sequence 71, Application US/10160786
Publication No. US20030225013A1
REBREAL INFORMATION:
APPLICANT: Susan M. Freier
APPLICANT: Kenneth W. Dobie
TITLE OF INVENTION: ANTISENSE MODULATION OF PHOSPHOINOSITIDE-3-KINASE, REGULATORY SUBITITLE OF INVENTION: P150 EXPRESSION
FILE REFERENCE: RTS-0376
CURRENT APPLICATION NUMBER: US/10/160,786
CURRENT FILING DATE: 2002-05-31
NUMBER OF SEQ ID NOS: 147
SEQ ID NO 71
LENGTH: 20
                           ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ö
                             Gape
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Gaрв
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ô
                             ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Length 20;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Length 20;
                           Indele
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Indela
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Indela
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Query Match
0.4%; Score 20; DB 1; L.
Best Local Similarity 100.0%; Pred. No. 2.6e+02;
Matches 20; Conservative 0; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Query Match
0.4%; Score 20; DB 1; Lu
Best Local Similarity 100.0%; Pred. No. 2.6e+02;
Matches 20; Conservative 0; Mismatchès 0;
         Pred. No. 2.6e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ; OTHER INFORMATION: Antisense Oligonucleotide US-10-160-786-71
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ; OTHER INFORMATION: Antisense Oligonucleotide US-10-160-786-70
      1 Similarity 100.0%; Pred. No. 2.6
20; Conservative 0; Mismatches
                                                                      3781 GAGGCTTCTAAGCTGCCCAA 3800
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 3899 TICTIGCCIAIGCCACIGIG 3918
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         3927 TCTGGTTGGCTGGGACCTTA 3946
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      US-10-160-786-72/c
'Sequence 72, Application US/10160786
'Publication No. US20030225013A1
'GENERAL INFORMATION:
                                                                                              20 GAGGCTTCTAAGCTGCCCAA 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       20 rrcrrgccrargccacrerg 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TYPE: DNA ORGANISM: Artificial Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ORGANISM: Artificial Sequence
    Best Local Similarity
Matches 20; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             JS-10-160-786-71/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TYPE: DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    RESULT 197
                                                                      ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  g
                                                                                                                                                                                                                                                                                                                                                                                                                                        RESULT 193

US-10-160-766-68/C

i Sequence 68, Application US/10160786

i Publication No. US20030225013A1

GAPBLICANT: Susan M. Freier

i APPLICANT: Susan M. Preier

APPLICANT: Renneth W. Dobie

TITLE OF INVENTION: P150 EXPRESSION

FILE REFERENCE: RTS-0376

CURRENT APPLICATION NUMBER: US/10/160,7866

CURRENT FILING DATE: 2002-05-31

NUMBER OF SEQ ID NOS: 147

LENGTH: 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Sequence 69, Application US/10160786

Sequence 69, Application US/10160786

Publication No. US20030225013A1

GENERAL INFORMATION:

APPLICANT: Susan M. Freier

APPLICANT: Kenneth W. Dobie

TITLE OF INVENTION: ANTISENSE MODULATION OF PHOSPHOINOSITIDE-3-KINASE, REGULATORY SUB

TITLE OF INVENTION: P150 EXPRESSION

FILE REFERENCE: RTS-0376

CURRENT APPLICATION NUMBER: US/10/160,786

CURRENT APPLICATION NUMBER: 2002-05-31

NUMBER OF SEQ ID NOS: 147

SEQ ID NO 69

LENGTH: 20
                                                                                                                                                                                                                                                                                                            ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ö
                                                                                                                                                                                                                                                                                                            Gaps
                                                                                                                                                                                                                                                                                                            ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        0.4%; Score 20; DB 1; Length 20; llarity 100.0%; Pred. No. 2.6e+02; Conservative 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                             0.4%; Score 20; DB 1; Length 20;
100.0%; Pred. No. 2.6e+02;
tive 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         0.4%; Score 20; DB 1; Length 20;
                                                                                                                                                                                             ; OTHER INFORMATION: Antisense Oligonucleotide US-10-160-786-67
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ; OTHER INFORMATION: Antisense Oligonucleotide
US-10-160-786-69
FILE REFERENCE: RTS-0376
CURRENT APPLICATION NUMBER: US/10/160,786
CURRENT FILING DATE: 2002-05-31
NUMBER OF SEQ ID NOS: 147
SEQ ID NO 67
LENGTH: 20
                                                                                                                                                                                                                                                                                                                                                     3583 TCACTTTTGCAACATGTTC 3602
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  3762 TGTCCAGCTTCTTGGAATTG 3781
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             20 TGTCCAGCTTCTTGGAATTG 1
                                                                                                                                                                                                                                                                                                                                                                                             20 rcacririrecaacareric 1
                                                                                                                              TYPE: DNA ORGANISM: Artificial Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TYPE: DNA ORGANISM: Artificial Sequence
                                                                                                                                                                                                                                                                                   Best Local Similarity 100.
Matches 20, Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Query Match
Best Local Similarity
Matches 20; Conserv
                                                                                                                                                                                                                                                               Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      셤
                                                                                                                                                                                                                                                                                                                                                       ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ઠ
```

```
US-10-160-786-75/c
US-10-160-786-75/c
US-10-160-786-75/c
Sequence 75, Application US/10160786
Sequence 75, Application No. US20030225013A1
GENERAL INFORMATION:
GENERAL INFORMATION:
TITLE OF INVENTION: P150 EXPRESSION
TITLE OF INVENTION: P160 EXPRESSION
TITLE OF INVENTION

                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              US-10-160-786-76/c

US-10-160-786-76/c

Sequence 76, Application US/10160786

Publication No. US20030225013A1

GENERAL INFORMATION:

APPLICANT: Susan M. Freier

APPLICANT: Kenneth W. Dobie

TITLE OF INVENTION: P150 EXPRESSION

FILE REPRENCE: RTS-0376

CURRENT APPLICATION NUMBER: US/10/160,786

CURRENT PILING DATE: 2002-05-31

NUMBER OF SEQ ID NOS: 147

SEQ ID NO 76

LENGTH: 20

LENGTH: 20

LENGTH: 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ó;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ö
                                                                                                                                                                                                                      ö
                                                                                                                                                                                                                               Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ö
                                                                                                                                                                                                                               ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                h Similarity 100.0%; Pred. No. 2.6e+02; 20; Conservative 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Query Match
0.4%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 2.6e+02;
Matches 20; Conservative 0; Mismatches 0; Indels
                                                                                                                                          DB 1; Length 20;
2.6e+02;
                                                                                                                                                                                                                               0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CTHER INFORMATION: Antisense Oligonucleotide US-10-160-786-76
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ; OTHER INFORMATION: Antisense Oligonucleotide US-10-160-786-75
; OTHER INFORMATION: Antisense Oligonuclectide US-10-160-786-74
                                                                                                                                          Query Match 0.4%; Score 20; DB Best Local Similarity 100.0%; Pred. No. 2.6 Matches 20; Conservative 0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  4212 GGAGACTGGTGACAGAAGAT 4231
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         4166 TGATTGCAGCTGTTCAGGGC 4185
                                                                                                                                                                                                                                                                                                                        4050 CAGTGGTACCATGGCTTGTT 4069
                                                                                                                                                                                                                                                                                                                                                                              20 CAGTGGTACCATGGCTTGTT 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   20 GGAGACTGGTGACAGAGAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TYPE: DNA ORGANISM: Artificial Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TYPE: DNA ORGANISM: Artificial Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           20;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Query Match
Best Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             RESULT 202
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      셤
                                                                                                                                                                                                                                                                                                                                                                                                             g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             US-10-160-786-74/C
US-10-160-786-74/C
US-10-160-786-74/C
US-10-160-786-74/C
US-10-160-786-74/C
US-10-160-786-74/C
US-10-160-74/C
US-160-74/C

                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        US-10-160-786-73/C

US-10-160-786-73/C

US-10-160-786-73/C

SQUENCE 73, Application US/10160786

Publication No. US20030225013A1

GENERAL INFORMATION:

APPLICANT: Susan M. Freier

APPLICANT: Kenneth W. Dobie

TITLE OF INVENTION: ANTISENSE MODULATION OF PHOSPHOINOSITIDE-3-KINASE, REGULATORY SUE

TITLE OF INVENTION: P150 EXPRESSION

TITLE OF INVENTION: NUMBER: US/10/160,786

CURRENT APPLICATION NUMBER: US/10/160,786

CURRENT FILING DATE: 2002-05-31

NUMBER OF SEQ ID NOS: 147

SEQ ID NO 73

LENGTH: 20
                          APPLICANT: Susan M. Freier
APPLICANT: Kenneth W. Dobie
TITLE OF INVENTION: ANTISENSE MODULATION OF PHOSPHOINOSITIDE-3-KINASE, REGULATORY SUE
TITLE OF INVENTION: 1910 EXPRESSION
FILE REFERENCE: RTS-0376
CURRENT APPLICATION NUMBER: US/10/160,786
CURRENT APPLICATION NUMBER: US/10/160,786
NUMBER OF SEQ ID NOS: 147
LENGTH: 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             / Match 0.4%; Score 20; DB 1; Length 20; Local Similarity 100.0%; Pred. No. 2.6e+02; nes 20; Conservative 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Query Match

0.4%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 2.6e+02;
Matches 20; Conservative 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ), OTHER INFORMATION: Antisense Oligonucleotide US-10-160-786-73
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ; OTHER INFORMATION: Antisense Oligonucleotide US-10-160-786-72
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                3991 GGCCTCATCACTTCCTTTGC 4010
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           3967 ACTITAAAGCAIGAITTAAA 3986
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             20 GGCCTCATCACTTCCTTTGC 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       20 ACTITAAAGCAIGATITAAA 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TYPE: DNA ORGANISM: Artificial Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TYPE: DNA ORGANISM: Artificial Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TYPE: DNA ORGANISM: Artificial Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Best Loca
Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ઠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           셤
```

```
Sequence 80, Application US/10160786

Publication No. US20030225013A1

GENERAL INFORMATION:
GENERAL INFORMATION:
TITLE OF INVENTION: ANTISENSE MODULATION OF PHOSPHOINOSITIDE-3-KINASE, REGULATORY SUBITITIES OF INVENTION: P150 EXPRESSION
TITLE OF INVENTION: R150-0376
CURRENT APPLICATION NUMBER: US/10/160,786
CURRENT FILING DATE: 2002-05-31
NUMBER OF SEQ ID NOS: 147

LENGTH: 20

LENGTH: 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Sequence 81, Application US/10160786
Fortication No. USSO030225013A1
GENERAL INFORMATION:
GENERAL INFORMATION:
GENERAL INFORMATION:
Freier
APPLICANT: Stander W. Dobie
TITLE OF INVENTION: ANTISENSE MODULATION OF PHOSPHOINOSITIDE-3-KINASE, REGULATORY SUBITITLE OF INVENTION: P150 EXPRESSION
FILE REFERENCE: RTS-0376
CURRENT APPLICATION NUMBER: US/10/160,786
CURRENT FILING DATE: 2002-05-31
NUMBER OF SEQ ID NOS: 147
SEQ ID NO 81
LENGTH: 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ö
                                                                                                                                                                                           ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 .;
0
                                                                                                                                                        Length 20;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Length 20;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Query Match 0.4%; Score 20; DB 1; Length 20; Best Local Similarity 100.0%; Pred. No. 2.6e+02; Matches 20; Conservative 0; Mismatches 0; Indels
                                                                                                                                                                                         Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Query Match 0.4%; Score 20; DB 1; Le:
Best Local Similarity 100.0%; Pred. No. 2.6e+02;
Matches 20; Conservative 0; Mismatches 0;
                                                                                                                                                    Query Match
0.4%; Score 20; DB 1; Le
Best Local Similarity 100.0%; Pred. No. 2.6e+02;
Matches 20; Conservative 0; Mismatches 0;
                                                                           ) FEATURE:
; OTHER INFORMATION: Antisense Oligonucleotide
US-10-160-786-79
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ; OTHER INFORMATION: Antisense Oligonucleotide US-10-160-786-80
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ; FEATURE:
; OTHER INFORMATION: Antisense Oligonucleotide
US-10-160-786-81
                                                                                                                                                                                                                               4309 AGTCCTGCAGATGGAAATCC 4328
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       4397 ATGTTGTTGCAGGAAGTACT 4416
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           4355 TGAAATAAGGTTTTGGGAC 4374
                                                                                                                                                                                                                                                                   20 AGTCCTGCAGATGGAAATCC 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               20 rcaaaaraaccrrrrcccac 1
                                     TYPE: DNA
ORGANISM: Artificial Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ORGANISM: Artificial Sequence FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TYPE: DNA ORGANISM: Artificial Sequence
                                                                                                                                                                                                                                                                                                                                              US-10-160-786-80/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          US-10-160-786-81/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TYPE: DNA
                                                                                                                                                                                                                                                                                                                            RESULT 205
                                                                                                                                                                                                                                 ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ò
US-10-160-786-77/c

Sequence 77, Application US/10160786

Publication No. US20030225013A1

GENERAL INFORMATION:

APPLICANT: Susan M. Freier

APPLICANT: Kenneth W. Dobie

TITLE OF INVENTION: P150 EXPRESSION

CURRENT APPLICATION NUMBER: US/10/160,786

CURRENT APPLICATION NUMBER: 2002-05-31

NUMBER OF SEQ ID NOS: 147
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ö
                                                                                                                                                                                                                                                                                                                                                                                                                                           Gape
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                           ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ö
                                                                                                                                                                                                                                                                                                                                                                                               0.4%; Score 20; DB 1; Length 20; 100.0%; Pred. No. 2.6e+02; iive 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Length 20;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Query Match
0.4%; Score 20; DB 1; Le
Best Local Similarity 100.0%; Pred. No. 2.6e+02;
Matches 20; Conservative 0; Mismatches 0;
                                                                                                                                                                                                                                                                                                                        ; FEATURE:
; OTHER INFORMATION: Antisense Oligonucleotide
US-10-160-786-77
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ; FEATURE:
; OTHER INFORMATION: Antisense Oligonucleotide
US-10-160-786-78
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            4258 CCACTITCTGAATTACAGCC 4277
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        4292 TCCATGGTATCTACTGTAGT 4311
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            20 TCCATGGTATCTACTGTAGT 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                20 CCACTTCTGAATTACAGCC 1
                                                                                                                                                                                                                                                                                                    ORGANISM: Artificial Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ORGANISM: Artificial Sequence
                                                                                                                                                                                                                                                                                                                                                                                                 Query Match
Best Local Similarity 100.
Matches 20; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       SEQ ID NO 78
LENGTH: 20
                                                                                                                                                                                                                                                                                    TYPE: DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TYPE: DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      g
```

ઠે

ઠે

ö

52

셤

```
APPLICANT: Susan M. Freier
APPLICANT: Susan M. Freier
APPLICANT: Kenneth W. Dobie
TITLE OF INVENTION: ANTISENSE MODULATION OF PHOSPHOINOSITIDE-3-KINASE, REGULATORY SUBU-
TITLE OF INVENTION: P150 EXPRESSION
FILE REFERENCE: RTS-0376
CURRENT APPLICATION NUMBER: US/10/160,786
CURRENT FILING DATE: 2002-05-31
NUMBER OF SEQ ID NOS: 147
SEQ ID NO 85
LENGTH: 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Sequence 86, Application US/10160786
Sequence 86, Application US/10160786
Sequence 86, Application No. US20030225013A1
GENERAL INFORMATION:
APPLICANT: Susan M. Freier
APPLICANT: Susan M. Freier
APPLICANT: Kenneth W. Dobie
TITLE OF INVENTION: ANTISENSE MODULATION OF PHOSPHOINOSITIDE-3-KINASE, REGULATORY SUBTITLE OF INVENTION: ANTISENSE INCOME.
TITLE OF INVENTION: US/10/160,786
CURRENT APPLICATION NUMBER: US/10/160,786
CURRENT PILING DATE: 2002-05-31
NUMBER OF SEQ ID NOS: 147
SEQ ID NO 86
LENGTH: 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  .
0
                                                                                                                                                                                                                                                                                                                        ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Gaps
                                                                                                                                                                                                                                                                                                                           Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ö
                                                                                                                                                                                                                                                                                                                           .
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          0.4%; Score 20; DB 1; Length 20; 100.0%; Pred. No. 2.6e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Length 20;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Indels
                                                                                                                                                                                                                                                                          Length 20;
                                                                                                                                                                                                                                                                                                                           0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   0.4%; Score 20; DB 1; L4
100.0%; Pred. No. 2.6e+02;
tive 0; Mismatches 0;
                                                                                                                                                                                                                                                                       Query Match
0.4%; Score 20; DB 1; L
Best Local Similarity 100.0%; Pred. No. 2.6e+02;
Matches 20; Conservative 0; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ; OTHER INFORMATION: Antisense Oligonucleotide US-10-160-786-86
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ; OTHER INFORMATION: Antisense Oligonucleotide US-10-160-786-85
                                                                                                                                                                                               ; OTHER INFORMATION: Antisense Oligonucleotide US-10-160-786-84
CURRENT APPLICATION NUMBER: US/10/160,786
CURRENT FILING DATE: 2002-05-31
NUMBER OF SEQ ID NOS: 147
SEQ ID NO 84
LENGTH: 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        4761 CTGTTTCATGACTGACTGAC 4780
                                                                                                                                                                                                                                                                                                                                                                            4633 GTGTGGAAATAAAACCTACT 4652
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Sequence 85, Application US/10160786; Publication No. US20030225013A1; GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    20 cretrrcardacreacreac 1
                                                                                                                                                                                                                                                                                                                                                                                                                20 GTGTGGAAATAAAACCTACT 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TYPE: DNA
ORGANISM: Artificial Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ORGANISM: Artificial Sequence
                                                                                                                                 TYPE: DNA
ORGANISM: Artificial Sequence
FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Best Local Similarity 100.
Matches 20; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           RESULT 210
US-10-160-786-85/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TYPE: DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       RESULT 211
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                  a
                                                                                                                                                                                                                                                                                                                                                                                    ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Sequence 83, Application US/10160786
Sequence 83, Application US/10160786
Sequence 83, Application US/20030225013A1
GENERAL INFORMATION:
APPLICANT: Suban M. Preier
APPLICANT: Kenneth W. Dobie
TITLE OF INVENTION: ANTISENSE MODULATION OF PHOSPHOINOSITIDE-3-KINASE, REGULATORY SUBTITLE OF INVENTION: ANTISENSE MODULATION OF PHOSPHOINOSITIDE-3-KINASE, REGULATORY SUBTITLE OF INVENTION: ANTISENSE WOUNDER: US/10/160,786
CURRENT APPLICATION NUMBER: US/10/160,786
CURRENT FILING DATE: 2002-05-31
NUMBER OF SEQ ID NOS: 147
SEQ ID NO 83
LENGTH: 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  APPLICANT: Susan M. Freier
APPLICANT: Susan M. Freier
APPLICANT: Kenneth W. Dobie
TITLE OF INVENTION: ANTISENSE MODULATION OF PHOSPHOINOSITIDE-3-KINASE, REGULATORY SUB-
TITLE OF INVENTION: P150 EXPRESSION
FILE REPERENCE: RTS-0376
                                                                                             RESULT 207
US-10-160-786-82/c
US-10-160-786-82/c
Sequence 82, Application US/10160786
Publication No. US20030225013A1
GENERAL INFORMATION:
APPLICANT: Susan M. Freier
TITLE OF INVENTION: ANTISENSE MODULATION OF PHOSPHOINOSITIDE-3-KINASE, REGULATORY SUBTITLE OF INVENTION: APPLICANTON UNBER: US/10/160,786
CURRENT APPLICATION NUMBER: US/10/160,786
CURRENT APPLICATION NUMBER: US/10/160,786
CURRENT FILING DATE: 2002-05-31
NUMBER OF SEQ ID NOS: 147
SEQ ID NO 82
LENGTH: 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Query Match 0.4%; Score 20; DB 1; Length 20; Best Local Similarity 100.0%; Pred. No. 2.6e+02; Matches 20; Conservative 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Length 20;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Query Match
0.4%; Score 20; DB 1; Le
Best Local Similarity 100.0%; Pred. No. 2.6e+02;
Matches 20; Conservative 0; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         , OTHER INFORMATION: Antisense Oligonucleotide US-10-160-786-83
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ; FEATURE:
; OTHER INFORMATION: Antisense Oligonucleotide
US-10-160-786-82
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              4461 TGAAGTTGTCCAGGAAATTC 4480
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sequence 84, Application US/10160786 Publication No. US20030225013A1 GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  4424 CATCTGTGTCTACTACAGG 4443
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   20 CATCTGTGTCCTACTACAGG 1
                    20 ATGTTGTTGCAGGAAGTACT 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ORGANISM: Artificial Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TYPE: DNA
ORGANISM: Artificial Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          RESULT 209
US-10-160-786-84/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              RESULT 208
US-10-160-786-83/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TYPE: DNA
```

ð 셤

셤 ð

```
Page 53

TITLE OF INVENTION: ANTISENSE MODULATION OF PHOSPHOINOSITIDE-3-KINASE, REGULATORY SUBILITIES OF INVENTION: P150 EXPRESSION
FILE REPERBNCE: RTS-0376
CURRENT FILLING DATE: 2002-05-31
NUMBER OF SEQ ID NOS: 147
SEG ID NO 89
LENGTH: 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Sequence 90, Application US/10160786
Publication No. US20030225013A1
GENERAL INFORMATION:
APPLICANT: Susan M. Freier
APPLICANT: Kenneth W. Dobie
TITLE OF INVENTION: ANTISENSE MODULATION OF PHOSPHOINOSITIDE-3-KINASE, REGULATORY SUBITILIES REFERENCE: RTS-0376
CURRENT APPLICATION NUMBER: US/10/160,786
CURRENT FILING DATE: 2002-05-31
NUMBER OF SEQ ID NOS: 147
SEQ ID NO 90
LENGTH: 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Sequence 91. Application US/10160786
Publication No. US20030225013A1
GENERAL INFORMATION:
APPLICANT: Susan M. Freier
APPLICANT: Susan M. Dobie
TITLE OF INVENTION: P150 EXPRESSION
FITLE OF INVENTION: P150 EXPRESSION
FITLE REFERENCE: RTS-0376
CURRENT APPLICATION NUMBER: US/10/160,786
CURRENT APPLICATION NUMBER: US/10/160,786
CURRENT FILING DATE: 2002-05-31
NUMBER OF SEQ ID NOS: 147
LENGTH: 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Gарв
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                0.4%; Score 20; DB 1; Length 20;
                                                                                                                                                                                                                                                                                                                                                                                                                         Length 20;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Length 20;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Indels
                                                                                                                                                                                                                                                                                                                                                                                       0.4%; Score 20; DB 1; Len
Pred. No. 2.6e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          DB 1; Le
                                                                                                                                                                                                                                                                                                                                                                                                                                      100.0%; Pred. ....
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Query Match

0.4%; Score 20; DB
Best Local Similarity 100.0%; Pred. No. 2.6
Matches 20; Conservative 0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           92 CGGTCTGCACTTCTCTCCCG 111
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          43 CGTTTGCTGGGGCTGCAGCA 62
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1 CGTTTGCTGGGGCTGCAGCA 20
                                                                                                                                                                                                                                                                                                                                                                                                                         Query Match
Best Local Similarity 100.
Matches 20; Conservative
                                                                                                                                                                                                                                                                                                                     TYPE: DNA
CRGANISM: H. sapiens
FEATURE:
US-10-160-786-89
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ORGANISM: H. sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ORGANISM: H. sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               JS-10-160-786-90
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             RESULT 216
US-10-160-786-91
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  US-10-160-786-90
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      US-10-160-786-91
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TYPE: DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TYPE: DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     FEATURE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ઠ
                                                                                                                                                                                                                                                                                                            Sequence 87, Application US/10160786
Publication No. US20030225013A1
GENERAL INFORMATION:
APPLICANT: Susan Prejer
APPLICANT: Kenneth W. Dobie
TITLE OF INVENTION: ANTISENSE MODULATION OF PHOSPHOINOSITIDE-3-KINASE, REGULATORY SUBTITLE OF INVENTION: APPLICANTON: P150 EXPRESSION
TITLE OF INVENTION: ANTISENSE MODULATION OF PHOSPHOINOSITIDE-3-KINASE, REGULATORY SUBTITLE REFERENCE: RTS-0376
CURRENT APPLICATION NUMBER: US/10/160,786
CURRENT PILING DATE: 2002-05-31
NUMBER OF SEQ ID NOS: 147
SEQ ID NO 87
LENGTH: 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                US-10-160-786-88/C

Sequence 88, Application US/10160786

Publication No. US20030225013A1

Publication No. US20030225013A1

Publication No. US20030225013A1

Publication No. US20030225013A1

APPLICANT: Susan M. Freier

APPLICANT: Kenneth W. Dobie

TITLE OF INVENTION: ANTISENSE MODULATION OF PHOSPHOINOSITIDE-3-KINASE, REGULATORY SUBTITLE OF INVENTION: P150 EXPRESSION
                                                                                                                                      ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ö
                                                                                                                                    Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Gaps
                                                                                                                                      ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                0.4%; Score 20; DB 1; Length 20; ilarity 100.0%; Pred. No. 2.6e+02; Conservative 0; Mismatches 0; Indels
                                                                                                                                    0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Length 20;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1) 10.4%; Score 20; DB 1; Lo ilarity 100.0%; Pred. No. 2.6e+02; Conservative 0; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ) OTHER INFORMATION: Antisense Oligonucleotide US-10-160-786-87
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          , OTHER INFORMATION: Antisense Oligonucleotide
US-10-160-786-88
                                                                                                                                    0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                FILE REPERENCE: RTS-0376
CURRENT APPLICATION NUMBER: US/10/160,786
CURRENT FILING DATE: 2002-05-31
NUMBER OF SEQ ID NOS: 147
SEQ ID NO 88
LENGTH: 20
                                                                                                                                                                          4776 CTGACTAAATGACACCCAAA 4795
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 4792 CAAAATGGTTAAGATGTACT 4811
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ; Sequence 89, Application US/10160786; Publication No. US20030225013A1; GENERAL INFORMATION:
                                                                                                                                                                                                 20 CTGACTAAATGACACCCAAA 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CTTATGCATCTCTTTGCAAG 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       20 CAAAATGGTTAAGATGTACT 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TYPE: DNA ORGANISM: Artificial Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TYPE: DNA ORGANISM: Artificial Sequence
                                                                                                                                  20; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              APPLICANT: Sugan M. Freier
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        4823 CTTATGCATCTCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Query Match
Best Local Similarity
Matches 20; Conservat
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Query Match
Best Local Similarity
Matches 20; Conserva
                                                                                                                                                                                                                                                                          RESULT 212
US-10-160-786-87/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               US-10-160-786-89
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 FEATURE:
                                                                                                                                  Matches
                                                                                                                                                                                                              g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          셤
                                                                                                                                                                          ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ઠે
```

```
TITLE OF INVENTION: ANTISENSE MODULATION OF PHOSPHOINOSITIDE-3-KINASE, REGULATORY SUBITITLE OF INVENTION: P150 EXPRESSION
FILE REPERENCE: RTS-0376
CURRENT APPLICATION NUMBER: US/10/160,786
CURRENT APPLICATION NUMBER: 2002-05-31
NUMBER OF SEQ ID NOS: 147
SEQ ID NO 94
LENGTH: 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sequence 95, Application US/10160786

Publication No. US20030225013A1

Publication No. US20030225013A1

GENERAL INFORMATION:
APPLICANT: Susan M. Freier
APPLICANT: Kenneth W. Dobie
TITLE OF INVENTION: ANTISENSE MODULATION OF PHOSPHOINOSITIDE-1-KINASE, REGULATORY SUBITILE OF INVENTION: P150 EXPRESSION
FILLE REFERENCE: RTS-0376
CURRENT APPLICATION NUMBER: US/10/160,786
CURRENT FILING DATE: 2002-05-31
NUMBER OF SEQ ID NOS: 147
SEQ ID NO 95
LENGTH: 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          US-10-160-786-96
Sequence 96, Application US/10160786
Sequence 96, Application WS/10160786
Sequence 96, Application World Worl
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                .;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               0.4%; Score 20; DB 1; Length 20; 100.0%; Pred. No. 2.6e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Length 20;
                                                                                                                                                                                                                                                                                                                                                                                                                                    DB 1; Length 20;
2.6e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Query Match 0.4%; Score 20; DB 1; Le Best Local Similarity 100.0%; Pred. No. 2.6e+02; Matches 20; Conservative 0; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                        Query Match 0.4%; Score 20; DB Best Local Similarity 100.0%; Pred. No. 2.6 Matches 20; Conservative 0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      703 CGAGAAGGCCTGGTCGTTGT 722
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          559 CTTGCCATTATGGGAAATCA 578
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1 cdadaaddccrddrcdrrdr 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1 crreccarrareceaaarca 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TYPE: DNA ORGANISM: H. sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                        TYPE: DNA
ORGANISM: H. sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TYPE: DNA ORGANISM: H.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ; FEATURE:
US-10-160-786-96
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     US-10-160-786-95
                                                                                                                                                                                                                                                                                                                                                                                  US-10-160-786-94
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     LENGTH: 20
                                                                                                                                                                                                                                                                                                                                                           FEATURE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         RESULT 221
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     qq
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         엄
                                                                                                                                                                                                                                      US-10-160-786-92
US-10-160-786-92
Sequence 92, Application US/10160786
Sequence 92, Application US/2030225013A1
GENERAL INFORMATION: US-10-25013A1
SENERAL INFORMATION: Picker
TITLE OF INVENTION: P150 EXPRESSION
TITLE OF INVENTION: P150 EXPRESSION
TITLE OF INVENTION: P150 EXPRESSION
CURRENT APPLICATION NUMBER: US/10/160,786
CURRENT APPLICATION NUMBER: US/10/160,786
CURRENT FILING DATE: 2002-05-31
NUMBER OF SEQ ID NOS: 147
SEQ ID NO 92
LENGTH: 20
THENTI : 20
THENTI : 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Sequence 93, Application US/10160786
Publication No. US20030225013A1
GENERAL INFORMATION:
BAPLICANT: State APPLICANT: State M. Dobie
TITLE OF INVENTION: ANTISENSE MODULATION OF PHOSPHOINOSITIDE-3-KINASE, REGULATORY SUBTITLE OF INVENTION: P150 EXPRESSION
FILE REFERENCE: RTS-0376
CURRENT APPLICATION NUMBER: US/10/160,786
CURRENT APPLICATION NUMBER: US/10/160,786
CURRENT PILING DATE: 2002-05-31
NUMBER OF SEQ ID NOS: 147
SEQ ID NO 93
LENGTH: 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ö
                                                                            ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Gaps
                                                                            Gabs
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ;
                                                                            ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Query Match

0.4%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 2.6e+02;
Matches 20; Conservative 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         0.4%; Score 20; DB 1; Length 20; 100.0%; Pred. No. 2.6e+02; tive 0; Mismatches 0; Indels
                                                                            Indels
                                           ilarity 100.0%; Pred. No. 2.6e+02; Conservative 0; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ; Sequence 94, Application US/10160786; Publication No. US20030225013A1; GENERAL INFORMATION: APPLICANT: Susan M. Freier; APPLICANT: Kenneth W. Dobie
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          534 AACCTTACTAAAGACCACAG 553
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        486 CCTCTGAACGATTTTGACAC 505
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1 AACCTTACTAAAGACCACAG 20
                                                                                                                                               377 AGCCCATCTCTGTCTATGA 396
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1 ccrcrcaaccarrrrcacac 20
                                                                                                                                                                                                        1 Agcccarcrcrcrcrarga 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Query Match
Best Local Similarity 100.0
Matches 20; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ORGANISM: H. sapiens
FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TYPE: DNA ORGANISM: H. sapiens
                                                  Best Local Similarity
Matches 20; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        US-10-160-786-94
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        RESULT 218
US-10-160-786-93
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  US-10-160-786-93
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      US-10-160-786-92
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            FEATURE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          g
                                                                                                                                                                                                               셤
                                                                                                                                                      8
```

```
Sequence 100, Application US/10160786

Publication No. US20030225013A1

GRNERAL INFORMATION:
GRNERAL INFORMATION:
GRNERAL INFORMATION:
Freier
APPLICANT: Susan M. Freier
APPLICANT: Kenneth W. Dobie
TITLE OF INVENTION: P150 EXPRESSION
FILE REFERENCE: R78-0376
CURRENT APPLICATION NUMBER: US/10/160,786
CURRENT APPLICATION NUMBER: US/10/160,786
SURVENT FILING DATE: 2002-05-31
NUMBER OF SEQ ID NOS: 147
SEQ ID NOS: 147
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Sequence 101, Application US/10160786
Publication No. US20030225013A1
GENERAL INFORMATION:
APPLICANT: Susan M. Freier
APPLICANT: Susan M. Freier
APPLICANT: Kenneth W. Dobie
TITLE OF INVENTION: ANTISENSE MODULATION OF PHOSPHOINOSITIDE-3-KINASE, REGULATORY SUBITILE OF INVENTION: ANTISENSE MODULATION OF PHOSPHOINOSITIDE-3-KINASE, REGULATORY SUBITILE OF INVENTION: B150 EXPRESSION
FILE REFERENCE: RTS-0376
CURRENT APPLICATION NUMBER: US/10/160,786
CURRENT FILING DATE: 2002-05-31
NUMBER OF SEQ ID NOS: 147
SEQ ID NO 101
                                                                                                                                                                                                                                                                                                                   ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ö
                                                                                                                                                                                                                                                                                                                   Gapв
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Gaps
                                                                                                                                                                                                                                                                                                                 ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ö
                                                                                                                                                                                                                                                                Query Match 0.4%; Score 20; DB 1; Length 20; Best Local Similarity 100.0%; Pred. No. 2.6e+02; Matches 20; Conservative 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     0.4%; Score 20; DB 1; Length 20;
100.0%; Pred. No. 2.6e+02;
iive 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Query Match 0.4%; Score 20; DB 1; Length 20; Best Local Similarity 100.0%; Pred. No. 2.6e+02; Matches 20; Conservative 0; Mismatches 0; Indele
TITLE OF INVENTION: P150 EXPRESSION FILE REPERENCE: TYS-0376 CURRENT APPLICATION NUMBER: US/10/160,786 CURRENT FILING DATE: 2002-05-31 NUMBER OF SEQ ID NOS: 147 SEQ ID NO 99 LENGTH: 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 982 GCACACAAATCTGGAGTTCG 1001
                                                                                                                                                                                                                                                                                                                                                             914 CCCGTCCATTCTTGAATAAC 933
                                                                                                                                                                                                                                                                                                                                                                                        1 CCCGTCCATTCTTGAATAAC 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1 GCACACAAATCTGGAGTTCG 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Query Match
Best Local Similarity 100.0
Matches 20; Conservative
                                                                                                                                                          TYPE: DNA
ORGANISM: H. Bapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TYPE: DNA
ORGANISM: H. sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TYPE: DNA
ORGANISM: H. sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              US-10-160-786-100
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                US-10-160-786-100
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            RESULT 226
US-10-160-786-101
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       US-10-160-786-101
                                                                                                                                                                                                                           US-10-160-786-99
                                                                                                                                                                                                    FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                    ద
                                                                                                                                                                                                                                                                                                                                                             ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           g
                                                                                                                                                                 Sequence 97, Application US/10160786

Sequence 97, Application US/10160786

Publication No. US20030225013A1

GENERAL INFORMATION:
TITLE OF INVENTION: ANTISENSE MODULATION OF PHOSPHOINOSITIDE-3-KINASE, REGULATORY SUB-
TITLE OF INVENTION: ANTISENSE MODULATION OF PHOSPHOINOSITIDE-3-KINASE, REGULATORY SUB-
TITLE OF INVENTION: P150 EXPRESSION
FILE REPERENCE: RTS-0376
CURRENT APPLICATION NUMBER: US/10/160,786
CURRENT APPLICATION NUMBER: 2002-05-31
NUMBER OF SEQ ID NOS: 147
SEQ ID NO 97
LENGTH: 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    RESULT 223
US-10-160-786-98
US-10-160-786-98
i Sequence 98, Application US/10160786
i Publication No. US20030225013A1
GENERAL INFORMATION:
APPLICANT: Susan M. Freier
APPLICANT: Kenneth W. Dobie
TITLE OF INVENTION: ANTISENSE MODULATION OF PHOSPHOINOSITIDE-3-KINASE, REGULATORY SUBTITE REFERENCE: RTS-0376
CURRENT APPLICATION NUMBER: US/10/160,786
CURRENT FILING DATE: 2002-05-31
NUMBER OF SEQ ID NOS: 147
SEQ ID NO 98
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             RESULT 224

US-10-160-786-99

Sequence 99, Application US/10160786

Publication No. US20030225013A1

GENERAL INFORMATION:

APPLICANT: Suban M. Freier

APPLICANT: Kenneth W. Dobie

TITLE OF INVENTION: ANTISENSE MODULATION OF PHOSPHOINOSITIDE-3-KINASE, REGULATORY SUB
    ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ö
    Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ö
  ô
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             0.4%; Score 20; DB 1; Length 20; 100.0%; Pred. No. 2.6e+02; tive 0; Mismatches 0; Indels
  0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           0.4%; Score 20; DB 1; Length 20;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               2.6e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    100.0%; Prec. ...
0; Mismatches
                                              780 GGAGGAACTGAAAATCAGGC 799
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   824 CTTTCCAGAAGCATCAGAA 843
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       875 GGCAGTATGTGCGAGACAAT 894
                                                                     1 GGAGGAACTGAAAATCAGGC 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Conservative
20; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         20; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Best Local Similarity
Matches 20; Conserva
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TYPE: DNA
ORGANISM: H. sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TYPE: DNA
ORGANISM: H. sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            US-10-160-786-97
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 US-10-160-786-98
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Matches
Matches
                                                                                g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   셤
                                              ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ઢ
```

```
APPLICANT: Susan M. Freier

APPLICANT: Susan M. Preier

APPLICANT: Susan M. Proble

TITLE OF INVENTION: ANTISENSE MODULATION OF PHOSPHOINOSITIDE-3-KINASE, REGULATORY SUBLITILE OF INVENTION: P150 EXPRESSION

TITLE OF INVENTION: P150 EXPRESSION

FILE REPERBURG: RTS-0376

CURRENT APPLICATION NUMBER: US/10/160,786

CURRENT FILING DATE: 2002-05-31

NUMBER OF SEQ ID NOS: 147

SEQ ID NO 105

LENGTH: 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Sequence 106, Application US/10160786

Sequence 106, Application US/10160786

Publication No. US20030225013A1

GENERAL INFORMATION:

APPLICANT: Susan M. Freier

APPLICANT: Kenneth W. Dobie

TITLE OF INVENTION: P150 EXPRESSION

TITLE OF INVENTION: P150 EXPRESSION

TITLE OF INVENTION: P150 EXPRESSION

FILE REFERENCE: RTS-0376

CURRENT APPLICATION UNMER: US/10/160,786

CURRENT FILING DATE: 2002-05-31

NUMBER OF SEQ ID NOS: 147

LEAGURE OF SEQ ID NOS: 147

LEAGURE OF SEQ ID NOS: 147
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ö
                                                                                                                                                                                                                                                                                                    ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Gaps
                                                                                                                                                                                                                                                                                                      Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    .
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ;
0
                                                                                                                                                                                                                                                                                                    ;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Length 20;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  0.4%; Score 20; DB 1; Length 20;
100.0%; Pred. No. 2.6e+02;
ive 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 0.4%; Score 20; DB 1; Length 20; ilarity 100.0%; Pred. No. 2.6e+02; Conservative 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                   Length 20;
                                                                                                                                                                                                                                                        DB 1; L6
2.6e+02;
                                                                                                                                                                                                                                                     Query Match 0.4%; Score 20; DB Best Local Similarity 100.0%; Pred. No. 2.6 Matches 20; Conservative 0; Mismatches
FILE REFERENCE: RTS-0376
CURRENT APPLICATION NUMBER: US/10/160,786
CURRENT FILING DATE: 2002-05-31
NUMBER OF SEQ ID NOS: 147
SEQ ID NO 104
LENGTH: 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ; Sequence 105, Application US/10160786; Publication No. US20030225013A1; GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1299 AGGTTGTGTGATAGCTGAGC 1318
                                                                                                                                                                                                                                                                                                                                                    1268 AGTIGAAGAGAGCAATGGAC 1287
                                                                                                                                                                                                                                                                                                                                                                                                1 AGTTGAAGAGAGCAATGGAC 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1 AGGTTGTGTGATAGCTGAGC 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Query Match 0.4°
Best Local Similarity 100.
Matches 20; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Query Match
Best Local Similarity
Matches 20; Conserval
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TYPE: DNA
ORGANISM: H. sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TYPE: DNA ORGANISM: H. sapiens
                                                                                                                                             TYPE: DNA
ORGANISM: H. sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               US-10-160-786-105
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                US-10-160-786-105
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ÚS-10-160-786-106
                                                                                                                                                                                                              US-10-160-786-104
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         LENGIH: 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          FEATURE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 g
                                                                                                                                                                                                                                                                                                                                                         ò
                                                                                                                                                                                                                                                                                                                                                                                                   셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               RESULT 229
US-10-160-786-104
US-10-160-786-104

Sequence 104, Application US/10160786

Publication No. US20030225013A1

GENERAL INFORMATION:

APPLICANT: Suean M. Freier

APPLICANT: Kenneth W. Dobie

ITILE OF INVENTION: ANTISENSE MODULATION OF PHOSPHOINOSITIDE-3-KINASE, REGULATORY SUE

TITLE OF INVENTION: P150 EXPRESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Sequence 103, Application US/10160786

Publication No. US20030225013A1

GENERAL INFORMATION:
GENERAL INFORMATION:
APPLICANT: Susan M. Freier
APPLICANT: Kenneth W. Dobie
TITLE OF INVENTION: ANTIGENSE MODULATION OF PHOSPHOINOSITIDE-3-KINASE, REGULATORY SUBTILLE OF INVENTION: P150 EXPRESSION
FILE REFERENCE: RTS-0376
CURRENT APPLICATION NUMBER: US/10/160,786
CURRENT APPLICATION NUMBER: US/10/160,786
CURRENT PILING DATE: 2002-05-31
NUMBER OF SEQ ID NOS: 147

SEQ ID NO 103
                                                                                                                                                                   US-10-160-786-102
Sequence 102, Application US/10160786
Sequence 102, Application US/10160786
Sequence 102, Application No. US20030225013A1
GENERAL INFORMATION:
APPLICANT: Susan M. Freier
APPLICANT: Stenneth W. Doble
TITLE OF INVENTION: P150 EXPRESSION
TITLE OF INVENTION: P150 EXPRESSION
FILE REFERENCE: RTS-0376
CURRENT PELICATION NUMBER: US/10/160,786
CURRENT FILING DATE: 2002-05-31
NUMBER OF SEQ ID NOS: 147
SEQ ID NO 102
LENGTH: 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   .
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  .;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                0.4%; Score 20; DB 1; Length 20;
100.0%; Pred. No. 2.6e+02;
iive 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Score 20; DB 1; Length 20;
Pred. No. 2.6e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Ouery Match 0.4%; Score 20; DB Best Local Similarity 100.0%; Pred. No. 2.6 Matches 20; Conservative 0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1083 CACTTATCTTCCAGAGACA 1102
                                  TTCGTCATGGGGACATCAAG 1017
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1032 GGTCACCAGTTGGAATTGGG 1051
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1 CACTTATCTTCCAGAAGACA 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            20
                                                                             1 rrcercaredecacarcaae 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Query Match
Best Local Similarity 100.
Matches 20; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TYPE: DNA
ORGANISM: H. sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TYPE: DNA
ORGANISM: H. sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ; FEATURE:
US-10-160-786-103
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           US-10-160-786-102
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     RESULT 228
US-10-160-786-103
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            셤
                                    ð
```

57

```
Sequence 110, Application US/10160786

Sequence 110, Application US/10160786

Sequence 110, DS2030225013A1

GENERAL INFORMATION:
GENERAL INFORMATION:
APPLICANT: Kenneth W. Dobie
TITLE OF INVENTION: ANTISENSE MODULATION OF PHOSPHOINOSITIDE-3-KINASE, REGULATORY SUBITIES OF INVENTION: ANTISENSE MOSPASSION
FILE REPRENCES RTS-0376
CURRENT APPLICATION NUMBER: US/10/160,786
CURRENT FILING DATE: 2002-05-31

NUMBER OF SEQ ID NOS: 147

SEQ ID NO 110

LENGTH: 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Sequence 111, Application US/10160786
Publication No. US20030225013A1
GENERAL INFORMATION:
GENERAL INFORMATION:
GENERAL INFORMATION:
TITLE OF INVENTION: ANTISENSE MODULATION OF PHOSPHOINOSITIDE-3-KINASE, REGULATORY SUBITITLE OF INVENTION: ANTISENSE MODULATION OF PHOSPHOINOSITIDE-3-KINASE, REGULATORY SUBITITLE OF INVENTION: PISO EXPRESSION
FILE REFERENCE: RTS-0376
CURRENT APPLICATION NUMBER: US/10/160,786
CURRENT FILING DATE: 2002-05-31
NUMBER OF SEQ ID NOS: 147
SEQ ID NO 111
LENGTH: 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Gape
                                                                                                                                                                                                                                                                                                      ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ô
                                                                                                                                                                                                                                                   Query Match 0.4%; Score 20; DB 1; Length 20; Best Local Similarity 100.0%; Pred. No. 2.6e+02; Matches 20; Conservative 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   0.4%; Score 20; DB 1; Length 20; 100.0%; Pred. No. 2.6e+02; tive 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Length 20;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Query Match
0.4%; Score 20; DB 1; Le:
Best Local Similarity 100.0%; Pred. No. 2.6e+02;
Matches 20; Conservative 0; Mismatches 0;
  CURRENT APPLICATION NUMBER: US/10/160,786
CURRENT FILING DATE: 2002-05-31
NUMBER OF SEQ ID NOS: 147
SEQ ID NO 109
LENGTH: 20
                                                                                                                                                                                                                                                                                                                                                    1658 AAAAAGCCGAAGGAGAGCCT 1677
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1706 CTGTTATAACATCCTGCCTA 1725
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1978 GCCCAAGATGATGCTACTAT 1997
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1 crerraracarccrecra 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Query Match
Best Local Similarity 100.0
Matches 20; Conservative
                                                                                                                        TYPE: DNA
ORGANISM: H. Bapiens
FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ORGANISM: H. sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TYPE: DNA
ORGANISM: H. sapiens
                                                                                                                                                                                                     US-10-160-786-109
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       US-10-160-786-110
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              US-10-160-786-110
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                US-10-160-786-111
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       US-10-160-786-111
                                                                                                                                                                                                                                                                                                                                                       ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ઠે
                                                                                                                                                              Sequence 107, Application US/10160786

Publication No. US20030225013A1

GENERAL INFORMATION:
APPLICANT: Susan M. Freier
APPLICANT: Renneth W. Dobie
TITLE OF INVENTION: ANTISENSE MODULATION OF PHOSPHOINOSITIDE-3-KINASE, REGULATORY SUBTILE REFERENCE: RTS-0376
CURRENT APPLICATION NUMBER: US/10/160,786
CURRENT APPLICATION NUMBER: 2002-05-31
NUMBER OF SEQ ID NOS: 147
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Sequence 108, Application US/10160786
Publication No. US20030225013A1
GENERAL INFORMATION:
APPLICANT: Susan Freier
APPLICANT: Kenneth W. Dobie
TITLE OF INVENTION: ANTISENSE MODULATION OF PHOSPHOINOSITIDE-3-KINASE, REGULATORY SUBTITLE OF INVENTION: P150 EXPRESSION
FILE REFERENCE: RTS-0376
CURRENT APPLICATION NUMBER: US/10/160,786
CURRENT FILING DATE: 2002-05-31
NUMBER OF SEQ ID NOS: 147
SEQ ID NO 108
LENGTH: 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Sequence 109, Application US/10160786
Bublication No. US20030225013A1
GENERAL INFORMATION:
APPLICANT: Susan M. Freier
APPLICANT: Kenneth W. Dobie
TITLE OF INVENTION: ANTISENSE MODULATION OF PHOSPHOINOSITIDE-3-KINASE, REGULATORY SUBTILLE OF INVENTION: P150 EXPRESSION
FILE REFERENCE: RTS-0376
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ô
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       0.4%; Score 20; DB 1; Length 20; 100.0%; Pred. No. 2.6e+02; tive 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Query Match 0.4%; Score 20; DB 1; Length 20; Best Local Similarity 100.0%; Pred. No. 2.6e+02; Matches 20; Conservative 0; Mismatches 0; Indels
1414 GATCACAGTATCAGAGAATT 1433
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1498 CAGCGTGGCAATGCCTTTCC 1517
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1630 CACAATCTCTGTGGACATGA 1649
                            GATCACAGTATCAGAGAATT 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       caecereccaarecerrrec 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Best Local Similarity 100.0
Matches 20; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TYPE: DNA
ORGANISM: H. Bapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TYPE: DNA
ORGANISM: H. sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            RESULT 233
US-10-160-786-108
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         US-10-160-786-107
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        RESULT 234
US-10-160-786-109
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  US-10-160-786-108
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          LENGTH:
                                              g
ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ઠ
```

```
Sequence 115, Application US/10160786
Fublication No. US20030225013A1
GENERAL INFORMATION:
APPLICANT: Susan M. Freier
APPLICANT: Kenneth W. Dobie
TITLE OF INVENTION: ANTISENSE MODULATION OF PHOSPHOINOSITIDE-3-KINASE, REGULATORY SUBLATILE REFERENCE: PISO EXPRESSION
TITLE OF INVENTION: PISO EXPRESSION
TITLE REFERENCE: RTS-0376
CURRENT APPLICATION NUMBER: US/10/160,786
CURRENT FILING DATE: 2002-05-31
NUMBER OF SEQ ID NOS: 147
SEQ ID NO 115
ILENGTH: 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Publication No. US20030225013A1

Redinence 116, Application US/10160786

Publication No. US20030225013A1

GENERAL INFORMATION:

APPLICANT: Susan M. Freier

APPLICANT: Susan M. Freier

TITLE OF INVENTION: ANTISENSE MODULATION OF PHOSPHOINOSITIDE-3-KINASE, REGULATORY SUSA

TITLE OF INVENTION: P150 EXPRESSION

FILE REPERENCE: RTS-0376

CURRENT APPLICATION NUMBER: US/10/160,786

CURRENT APPLICATION DATE: 2002-05-31

SEQ ID NO 116
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ö
                                                                                                                                                                                                                                               ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          .;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       .;
0
                                                                                                                                                                                                                                                    ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Query Match 0.4%; Score 20; DB 1; Length 20; Best Local Similarity 100.0%; Pred. No. 2.6e+02; Matches 20; Conservative 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Query Match

0.4%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 2.6e+02;
Matches 20; Conservative 0; Mismatches 0; Indels
                                                                                                                                                                                                    Length 20;
                                                                                                                                                                                                  Query Match 0.4%; Score 20; DB 1; Le Best Local Similarity 100.0%; Pred. No. 2.6e+02; Matches 20; Conservative 0; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        2438 TTAGTGATGCTGAGGAATTT 2457
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       2391 TGGCTGGCAAAGCTCCTCAA 2410
                                                                                                                                                                                                                                                                                                  2131 CCAAATGGAAATTATGACAC 2150
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1 TGGCTGGCAAAGCTCCTCAA 20
                                                                                                                                                                                                                                                                                                                                           1 ccaaarggaaarrargacac 20
CURRENT FILING DATE: 2002-05-31 WINDER OF SEQ ID NOS: 147 SEQ ID NO 114 LENGTH: 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TYPE: DNA
ORGANISM: H. sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ORGANISM: H. sapiens
                                                                                           TYPE: DNA ORGANISM: H. sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   US-10-160-786-115
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        RESULT 241
US-10-160-786-116
                                                                                                                                                                US-10-160-786-114
                                                                                                                                           FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                LENGTH:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ð
                                                                                                                                                                                                                                                                                                       ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sequence 113, Application US/10160786
Publication No. US20030225013A1
GENERAL INFORMATION:
GENERAL INFORMATION:
TITLE OF INVENTION: APPLICANT: Kenneth W. Dobie
TITLE OF INVENTION: P150 EXPRESSION
TITLE OF INVENTION: P150 EXPRESSION
FILE REPERROR: RTS-0376
CURRENT APPLICATION NUMBER: US/10/160,786
CURRENT FILING DATE: 2002-05-31
NUMBER OF SEQ ID NOS: 147
SEQ ID NO 113
LENGTH: 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             US-10-160-786-114

Sequence 114, Application US/10160786

Sequence 114, Application US/10160786

Publication No. US20030225013A1

GENERAL INFORMATION:

APPLICANT: Susan M. Freier

APPLICANT: Kenneth W. Dobie

TITLE OF INVENTION: ANTISENSE MODULATION OF PHOSPHOINOSITIDE-3-KINASE, REGULATORY SUBTILE REFERENCE: RTS-0376

CURRENT APPLICATION NUMBER: US/10/160,786
                                                                                                                                 Sequence 12, Application US/10160786

Publication No. US20030225013A1

GENERAL INFORMATION:
APPLICATT: Susan M. Freier
APPLICATY: Susan M. Freier
TITLE OF INVENTION: ANTISENSE MODULATION OF PHOSPHOINOSITIDE-3-KINASE, REGULATORY SUB-
TITLE OF INVENTION: ANTISENSE MODULATION OF PHOSPHOINOSITIDE-3-KINASE, REGULATORY SUB-
TITLE OF INVENTION: PL50 EXPRESSION
FILE REFERENCE: RTS-0376
CURRENT APPLICATION NUMBER: US/10/160,786
CURRENT PILLING DATE: 2002-05-31
SEQ ID NO 112
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Gapв
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         0.4%; Score 20; DB 1; Length 20;
100.0%; Pred. No. 2.6e+02;
ive 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            0.4%; Score 20; DB 1; Length 20; 100.0%; Pred. No. 2.6e+02; tive 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            2080 CTTAATATGGAAAATGACCC 2099
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         2041 ACAGCTCTGAGATTCCTGGA 2060
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1 CTTAATATGGAAAATGACCC 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1 ACAGCTCTGAGATTCCTGGA 20
                                 GCCCAAGATGATGCTACTAT 20
         Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Query Match 0.4
Best Local Similarity 100.
Matches 20; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Local Similarity
nes 20; Conserva
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ORGANISM: H. sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                    TYPE: DNA
ORGANISM: H. sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     FEATURE:
US-10-160-786-113
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            RESULT 238
US-10-160-786-113
                                                                                                    RESULT 237
US-10-160-786-112
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       US-10-160-786-112
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Query Match
Best Local S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 RESULT 239
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Š
```

셤

```
US-10-160-786-120
US-10-160-786-120
Sequence 120, Application US/10160786
Sequence 120, Application No. US2030225013A1
GENERAL INFORMATION:
SENDICATION NO. US2030225013A1
GENERAL INFORMATION:
SETTLE OF INVENTION:
TITLE OF INVE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     US-10-160-786-121
Sequence 121, Application US/10160786
Publication No. US20030225013A1
GENERAL INFORMATION:
APPLICANT: Susan M. Freier
APPLICANT: Kenneth W. Dobie
TITLE OF INVENTION: ANTISENSE MODULATION OF PHOSPHOINOSITIDE-1-KINASE, REGULATORY SUBI
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ô
                                                                                                                                                                                                                                                                                                               ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ô
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Gape
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Gape
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ..
0
                                                                                                                                                                                                                                                                                                               ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ö
                                                                                                                                                                                                                                                     Length 20;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Length 20;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Length 20;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            DB 1; Le
2.6e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          DB 1; Le
2.6e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   0.4%; Score 20; DB
100.0%; Pred. No. 2.6
tive 0; Mismatches
                                                                                                                                                                                                                                              Ouery Match 0.4%; Score 20; DB Best Local Similarity 100.0%; Pred. No. 2.6 Matches 20; Conservative 0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Query Match 0.4%; Score 20; DB Best Local Similarity 100.0%; Pred. No. 2.6 Matches 20; Conservative 0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CURRENT APPLICATION NUMBER: US/10/160,786
CURRENT FILING DATE: 2002-05-31
NUMBER OF SEQ ID NOS: 147
SEQ ID NO 121
LENGTH: 20
                                                                                                                                                                                                                                                                                                                                                                            2587 GCTGCCGTGGGATTTATCAC 2606
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   2731 GAACCAGIAAGICGIICIAI 2750
                                                                                                                                                                                                                                                                                                                                                                                                                                   1 GGTGCCGTGGGATTTATCAC 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1 GAACCAGTAAGTCGTTCTAT 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1 GCCCTCCGCCAGAGGATCCT 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Query Match
Best Local Similarity 100.
Matches 20; Conservative
NUMBER OF SEQ ID NOS: 147
SEQ ID NO 119
LENGTH: 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ORGANISM: H. sapiens
                                                                                          ; TYPE: DNA
; ORGANISM: H. Bapiens
; FEATURE:
US-10-160-786-119
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ORGANISM: H. sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  US-10-160-786-120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            US-10-160-786-121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TYPE: DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 RESULT 246
                                                                                                                                                                                                                                                                                                                                                                            ઠ
                                                                                                                                                                                                                                                                                                                                                                                                                             g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           RESULT 243
US-10-160-718
US-10-160-718, Application US/10160786

Publication No. US2003022013A1
GENERAL INFORMATION:
GENERAL INFORMATION:
APPLICANT: Susan M. Freier
APPLICANT: Susan M. Preier
TITLE OF INVENTION:
TITLE OF INVENTION:
FILE REFERENCE: RTS-0376
CURRENT APPLICATION NUMBER: US/10/160,786
CURRENT APPLICATION NUMBER: US/10/160,786
CURRENT FILING DATE: 2002-05-31
SEQ. ID NO 118
                                                                                                                                                                                                                                     APPLICANT: Susan M. Prejer
APPLICANT: Susan M. Dobie
TITLE OF INVENTION: ANTISENSE MODULATION OF PHOSPHOINOSITIDE-3-KINASE, REGULATORY SUS
TITLE OF INVENTION: P150 EXPRESSION
FILE REFERENCE: RTS-0376
CURRENT FPLING DATE: 2002-05-31
NUMBER OF SEQ ID NOS: 147
SEQ ID NO 117
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        RESULT 244

US-10-160-786-119
Sequence 119, Application US/10160786
Sequence 119, Sequence 119, Evaluation US/10160786
Publication No. US20030225013A1
GENERAL INFORMATION:
APPLICANT: Kenneth W. Doble
TITLE OF INVENTION: ANTISENSE MODULATION OF PHOSPHOINOSITIDE-3-KINASE, REGULATORY SUBTITLE OF INVENTION: P150 EXPRESSION
TITLE OF INVENTION: P150 EXPRESSION
FILE REPERENCE: RTS-0376
CURRENT FILING DATE: 2002-05-31
CURRENT FILING DATE: 2002-05-31
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Gapa
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Length 20;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Length 20;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Query Match

0.4%; Score 20; DB 1; Le
Best Local Similarity 100.0%; Pred. No. 2.6e+02;
Matches 20; Conservative 0; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Score 20; DB 1; Le
Pred. No. 2.6e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            0.4%; Scor.
100.0%; Pred. No. 2.
                                                                                                                                                 ; Sequence 117, Application US/10160786; Publication No. US20030225013A1; GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                2524 GTTTACGAATTTGCCAGTGA 2543
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          2555 TCCTGTGTCATCCCAATTTA 2574
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1 Grrracgaarrreccagrea 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1 TTAGTGATGCTGAGGAATTT 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Query Match
Best Local Similarity 100.
Matches 20; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TYPE: DNA
ORGANISM: H. sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TYPE: DNA
ORGANISM: H. sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        US-10-160-786-117
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      US-10-160-786-118
                                                                                                                             US-10-160-786-117
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              LENGTH: 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           FEATURE:
```

요

셤 ઠ

```
Publication US/10160786

Sequence 125, Application US/10160786

Publication No. 1020

Bublication No. 1020

APPLICANT: Susan M. Freier

APPLICANT: Susan M. Freier

APPLICANT: Remeth W. Dobie

TITLE OF INVENTION: ANTISENSE MODULATION OF PHOSPHOINOSITIDE-3-KINASE, REGULATORY SUBLITILE OF INVENTION: P150 EXPRESSION

FILE REFERENCE: RTS-0376

CURRENT PLILING DATE: 2002-05-31

NUMBER OF SEQ ID NOS: 147

SEQ ID NO 125
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Sequence 126, Application US/10160786

Publication No. US20030225013A1

GENERAL INFORMATION:
GENERAL INFORMATION:
APPLICANT: Subsan M. Preier
APPLICANT: Subsan M. Probie
TITLE OF INVENTION: ANTISENSE MODULATION OF PHOSPHOINOSITIDE-3-KINASE, REGULATORY SUBSACTION OF PROBLICANT APPLICATION NUMBER: US/10/160,786
CURRENT APPLICATION NUMBER: US/10/160,786
CURRENT FILING DATE: 2002-05-31
NUMBER OF SEQ ID NOS: 147
SEQ ID NO 126
LENGTH: 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ö
                                                                                                                                                                                                                                                  ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    .
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ö
                                                                                                                                                                                                                                                  ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Length 20;
                                                                                                                                                                               DB 1; Length 20; 2.6e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Length 20;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    0; Indels
                                                                                                                                                                                                                                                  Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ch 0.4%; Score 20; DB 1; Le 1. Similarity 100.0%; Pred. No. 2.6e+02; 20; Conservative 0; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                0.4%; Score 20; DB 1; Le
ilarity 100.0%; Pred. No. 2.6e+02;
Conservative 0; Mismatches 0;
                                                                                                                                                                                        Query Match 0.4%; Score 20; DB Best Local Similarity 100.0%; Pred. No. 2.6 Matches 20; Conservative 0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 3250 TCTGCTGCATTTGTGTCCC 3269
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         3057 AGTTGATCTTGTTAAAACCA 3076
                                                                                                                                                                                                                                                                                                        3009 TCAGAAAGGTGTAATTGACT 3028
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1 rcrecrescarrrererece 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1 AGTIGATCTTGTTAAAACCA 20
                                                                                                                                                                                                                                                                                                                                               1 TCAGAAAGGTGTAATTGACT 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TYPE: DNA
ORGANISM: H. sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TYPE: DNA ORGANISM: H. sapiens
                                          TYPE: DNA
ORGANISM: H. sapiens
FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Query Match
Best Local Similarity
Matches 20; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          US-10-160-786-126
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   US-10-160-786-125
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        US-10-160-786-125
                                                                                                                                           US-10-160-786-124
SEQ ID NO 124
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Matches
                           LENGTH:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       d
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Ωp
                                                                                                                                                                                                                                                                                                                    ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Sequence 124, Application US/10160786
Publication No. US20030225013A1
GENERAL INFORMATION:
APPLICANT: Susan M. Freier
APPLICANT: Kenneth W. Dobie
TITLE OF INVENTION: ANTISENSE MODULATION OF PHOSPHOINOSITIDE-3-KINASE, REGULATORY SUBTILE REPERENCE: RTS-0376
CURRENT APPLICATION NUMBER: US/10/160,786
CURRENT FILING DATE: 2002-05-31
NUMBER OF SEQ ID NOS: 147
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Sequence 123, Application US/10160786
Publication No. US20030225013A1
GENERAL INFORMATION
APPLICANT: Susan M. Freier
APPLICANT: Kenneth W. Dobie
TITLE OF INVENTION: P150 EXPRESSION
TITLE OF INVENTION
TITLE
                                                            ..
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             .
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 0.4%; Score 20; DB 1; Length 20;
100.0%; Pred. No. 2.6e+02;
tive 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   0.4%; Score 20; DB 1; Length 20; 100.0%; Pred. No. 2.6e+02; rive 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            2860 CCTGCCATAGCACAGCTTCT 2879
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          2913 AGAGGAAGACAAACTTCTGG 2932
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1 AGAGGAAGACAAACTTCTGG 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1 ccreccaraccacaccrici 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Query Match 0.45
Best Local Similarity 100.0
Matches 20; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Query Match 0.4
Best Local Similarity 100.
Matches 20; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TYPE: DNA
ORGANISM: H. sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TYPE: DNA
ORGANISM: H. sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     RESULT 249
US-10-160-786-124
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     US-10-160-786-122
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ÚS-10-160-786-123
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        FEATURE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   d
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ઠ
```

```
Sequence 130, Application US/10160786
Publication No. US20030225013A1
GENERAL INFORMATION:
APPLICAMY: Susan M. Freier
APPLICAMY: Kenneth W. Dobie
TITLE OF INVENTION: ANTISENSE MODULATION OF PHOSPHOINOSITIDE-3-KINASE, REGULATORY SUBITILE REPREBENCE: RTS-0376
CURRENT PILLING DATE: 2002-05-31
NUMBER OF SEQ ID NOS: 147
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sequence 131, Application US/10160786
Publication No. US20030225013A1
GENERAL INFORMATION:
APPLICANT: Susan M. Freier
APPLICANT: Susan M. Freier
TITLE OF INVENTION: ANTISENSE MODULATION OF PHOSPHOINOSITIDE-3-KINASE, REGULATORY SUBITITLE OF INVENTION: APISO EXPRESSION
FILE REFERENCE: RTS-0376
CURRENT APPLICATION NUMBER: US/10/160,786
CURRENT FILING DATE: 2002-05-31
NUMBER OF SEQ ID NOS: 147
SEQ ID NO 131
LENGTH: 20
                                                                                                                                                                                        ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ô
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Gape
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Length 20;
                                                                                                                                         Length 20;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Length 20;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Query Match 0.4%; Score 20; DB 1; Le:
Best Local Similarity 100.0%; Pred. No. 2.6e+02;
Matches 20; Conservative 0; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       0.4%; Score 20; DB 1; Le lilarity 100.0%; Pred. No. 2.6e+02; Conservative 0; Mismatches 0;
                                                                                                                                      0.4%; Score 20; DB 1; L. 100.0%; Pred. No. 2.6e+02; iive 0; Mismatches 0;
                                                                                                                                                                                                                                  3388 AAAACTGAACTTCAGCAACT 3407
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                3431 GCAATGCTGAGAGAATAGCT 3450
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      3455 AGATGATGGAAAATGCTGAA 3474
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1 GCAATGCTGAGAGAATAGCT 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1 AGATGATGGAAATGCTGAA 20
                                                                                                                                                           Best Local Similarity 100.0
Matches 20; Conservative
LENGTH: 20
TYPE: DNA
ORGANISM: H. Bapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TYPE: DNA
ORGANISM: H. sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ORGANISM: H. sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Query Match
Best Local Similarity
Matches 20; Conserv
                                                                                                                                                                                                                                                                                                                                                                    US-10-160-786-130
                                                                         ; FEATURE:
US-10-160-786-129
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ; FEATURE:
US-10-160-786-130
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  US-10-160-786-131
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ; FEATURE:
US-10-160-786-131
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               SEQ ID NO 130
LENGTH: 20
                                                                                                                                         Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TYPE: DNA
                                                                                                                                                                                                                                     ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ઠે
                                                           Sequence 127, Application US/10160786
Publication No. US20030225013A1
GENERAL INFORMATION:
APPLICANT: Susan M. Freier
APPLICANT: Susan M. Freier
TITLE OF INVENTION:
TITLE OF INVENTION:
FILE REFERENCE: RTS-0376
CURRENT APPLICATION NUMBER: US/10/160,786
CURRENT APPLICATION NUMBER: US/10/160,786
CURRENT PILING DATE: 2002-05-31
NUMBER OF SEQ ID NOS: 147
SEQ ID NO 127
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                RESULT 253
US-10-160-786-128
US-10-160-786-128
Sequence 128, Application US/10160786
Publication No. US20030225013A1
GENERAL INFORMATION:
APPLICANT: Suban M. Freier
APPLICANT: Kenneth W. Dobie
TITLE OF INVENTION: P150 EXPRESSION
TITLE OF INVENTION: P150 EXPRESSION
TITLE OF INVENTION: P150 EXPRESSION
CURRENT APPLICATION NUMBER: US/10/160,786
CURRENT APPLICATION NUMBER: US/10/160,786
CURRENT PILING DATE: 2002-05-31
NUMBER OF SEQ ID NOS: 147
SEQ ID NO 128
LENGTH: 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Sequence 129, Application US/10160786
Publication No. US20030225013A1
GENERAL INFORMATION:
APPLICANT: Susan M. Freier
APPLICANT: Kenneth W. Dobie
TITLE OF INVENTION: ANTISENSE MODULATION OF PHOSPHOINOSITIDE-3-KINASE, REGULATORY SUB
TITLE OF INVENTION: ANTISENSE MODULATION OF PHOSPHOINOSITIDE-3-KINASE, REGULATORY SUB
TITLE OF INVENTION: PLSO EXPRESSION
FILE REFERENCE: RTS-0376
CURRENT APPLICATION NUMBER: US/10/160,786
CURRENT FILING DATE: 2002-05-31
NUMBER OF SEQ ID NOS: 147
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 0.4%; Score 20; DB 1; Length 20; 100.0%; Pred. No. 2.6e+02; ive 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Length 20;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Score 20; DB 1; L
Pred. No. 2.6e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      0.4%; brod. No. 2.100.0%; Pred. No. 2.100.0%; Pred. No. 2.100.0%; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           3318 AAAACCAGTAATACCGGTTT 3337
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1 AAAACCAGTAATACCGGTTT 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1 Gradiacaarcitaccarcc 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Query Match
Best Local Similarity 100.
Matches 20; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Query Match
Best Local Similarity 100.
Matches 20; Conservative
                                                                                                                                                                                                                                                                                                                                                                                       ORGANISM: H. sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ORGANISM: H. sapiens
                                                 US-10-160-786-127
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       US-10-160-786-128
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          RESULT 254
US-10-160-786-129
                                                                                                                                                                                                                                                                                                                                                                                                                                    US-10-160-786-127
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TYPE: DNA
                                                                                                                                                                                                                                                                                                                                                                       TYPE: DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            g
```

```
Sequence 135, Application US/10160786

Sequence 135, Application US/10160786

Sequence 135, Application No. US20030225013A1

GENERAL INFORMATION:
HAPPLICANT: Seameth W. Dobie
TITLE OF INVENTION: ANTISENSE MODULATION OF PHOSPHOINOSITIDE-3-KINASE, REGULATORY SUBL.
TITLE OF INVENTION: ANTISENSE MODULATION OF PHOSPHOINOSITIDE-3-KINASE, REGULATORY SUBL.
TITLE OF INVENTION: P150 EXPRESSION
FILE REFERENCE: RTS-0376
CURRENT APPLICATION NUMBER: US/10/160,786
CURRENT FILING DATE: 2002-05-31
NUMBER OF SEQ ID NOS: 147

SEQ ID NO 135
LENGTH: 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Sequence 136, Application US/10160786
; Sequence 136, Application US/2003025013A1
GENERAL INFORMATION:
GENERAL INFORMATION:
APPLICANT: Susan M. Preier
TITLE OF INVENTION: ANTISENSE MODULATION OF PHOSPHOINOSITIDE-3-KINASE, REGULATORY SUBITITLE OF INVENTION: P150 EXPRESSION
FITLE OF INVENTION: P150 EXPRESSION
FITLE REPERENCE: RTS-0376
CURRENT APPLICATION NUMBER: US/10/160,786
CURRENT FILLING DATE: 2002-05-31
NUMBER OF SEQ ID NOS: 147
SEQ ID NO 136
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ö
                                                                                                                                                         ö
                                                                                                                                                            Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           .;
0
                                                                                                                                                            ;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ..
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Query Match 0.4%; Score 20; DB 1; Length 20; Best Local Similarity 100.0%; Pred. No. 2.6e+02; Matches 20; Conservative 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 0.4%; Score 20; DB 1; Length 20;
100.0%; Pred. No. 2.6e+02;
tive 0; Mismatches 0; Indels
                                                                                                        Query Match 0.4%; Score 20; DB 1; Length 20; Best Local Similarity 100.0%; Pred. No. 2.6e+02; Matches 20; Conservative 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          3899 TICTIGCCTAIGCCACIGIG 3918
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      3762 IGICCAGCIICTIGGAATIG 3781
                                                                                                                                                                                                           3583 TCACTTTTTGCAACATGTTC 3602
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1 rerccaecriciredarie 20
                                                                                                                                                                                                                                                        1 rcacririrdcaacardric 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Query Match 0.45
Best Local Similarity 100.0
Matches 20; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TYPE: DNA ORGANISM: H. sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ORGANISM: H. sapiens
FEATURE:
; TYPE: DNA
; ORGANISM: H. sapiens
; FEATURE:
US-10-160-786-134
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       US-10-160-786-136
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              US-10-160-786-135
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           RESULT 261
US-10-160-786-136
                                                                                                                                                                                                                                                                                                                                  RESULT 260
US-10-160-786-135
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TYPE: DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    RESULT 262
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ò
                                                                                                                                                                                                                  ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sequence 133, Application US/10160786

Sequence 133, Application US/10160786

Publication No. US20030225013A1

GENERAL INFORMATION:
APPLICANT: Susan M. Freier
APPLICANT: Kenneth W. Dobie
TITLE OF INVENTION: ANTIENSE MODULATION OF PHOSPHOINOSITIDE-3-KINASE, REGULATORY SUBTITLE OF INVENTION: P150 EXPRESSION
TITLE OF INVENTION: P150 EXPRESSION
CURRENT APPLICATION NUMBER: US/10/160,786
CURRENT APPLICATION NUMBER: US/10/160,786
CURRENT PILING DATE: 2002-05-31
NUMBER OF SEQ ID NOS: 147
SEQ ID NO 133
LENGTH: 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      RESULT 259
US-10-160-786-134
US-10-160-786-134
Sequence 134, Application US/10160786
Publication No. US20030225013A1
GENERAL INFORMATION:
APPLICANT: Susan M. Freier
APPLICANT: Remeth W. Dobie
TITLE OF INVENTION: P150 EXPRESSION
TITLE OF INVENTION: P150 EXPRESSION
FILE REFERENCE: RTS-0376
CURRENT APPLICATION NUMBER: US/10/160,786
CURRENT PILING DATE: 2002-05-31
NUMBER OF SEQ ID NOS: 147
SEQ ID NO 134
LENGTH: 20
                                            Sequence 132, Application US/10160786

Publication No. US20030225013A1

GENERAL INFORMATION:
GENERAL INFORMATION:
TITLE OF INVENTION: ANTISENSE MODULATION OF PHOSPHOINOSITIDE-3-KINASE, REGULATORY SUB-
TITLE OF INVENTION: P150 EXPRESSION
FILE REFERENCE: RTS-0376
CURRENT APPLICATION NUMBER: US/10/160,786
CURRENT PILING DATE: 2002-05-31
NUMBER OF SEQ ID NOS: 147

SEQ ID NO 132
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Query Match

0.4%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 2.6e+02;
Matches 20; Conservative 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             0.4%; Score 20; DB 1; Length 20; 100.0%; Pred. No. 2.6e+02; tive 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         3555 GAATCGAATTAGAGTCTCTG 3574
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                3504 GCGTCCTAAAGGGCTGTTAG 3523
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      GAATCGAATTAGAGTCTCTG 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1 degreeraaadegergraa 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Local Similarity
nes 20; Conservat
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TYPE: DNA ORGANISM: H. sapiens
                                                                                                                                                                                                                                                                                                                                                                  TYPE: DNA
ORGANISM: H. sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   US-10-160-786-133
            RESULT 257
US-10-160-786-132
                                                                                                                                                                                                                                                                                                                                                                                                                                          US-10-160-786-132
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Best Loca
Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ઠે
```

```
Sequence 140, Application US/10160786

Publication No. US20030225013A1

GENERAL INFORMATION:
APPLICANT: Susan M. Freier
APPLICANT: Susan M. Preier
TITLE OF INVENTION: ANTISENSE MODULATION OF PHOSPHOINOSITIDE-3-KINASE, REGULATORY SUBILITIES REFERENCE: RTS-0376
CURRENT APPLICATION NUMBER: US/10/160,786
CURRENT FILING DATE: 2002-05-31
NUMBER OF SEQ ID NOS: 147
SEQ ID NO 140
LENGTH: 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    WS-10-160-786-141

Sequence 141, Application US/10160786

Publication No. US20030225013A1

GENERAL INFORMATION:

APPLICANT: Susan M. Freier

APPLICANT: Susan M. Freier

APPLICANT: Remeth W. Dobie

TITLE OF INVENTION: P150 EXPRESSION

TITLE OF INVENTION: P150 EXPRESSION

TITLE OF INVENTION: P150 EXPRESSION

CURRENT APPLICATION NUMBER: US/10/160,786

CURRENT FILING DATE: 2002-05-31

NUMBER OF SEQ ID NOS: 147

LENGTH: 20

LENGTH: 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Gapa
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         .
0
                                                                                                                              ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Length 20;
                                                                                    Length 20;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    0.4%; Score 20; DB 1; Length 20; 100.0%; Pred. No. 2.6e+02; ive 0; Mismatches 0; Indels
                                                                                  DB 1; Le
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Query Match 0.4%; Score 20; DB 1; Lei
Best Local Similarity 100.0%; Pred. No. 2.6e+02;
Matches 20; Conservative 0; Mismatches 0;
                                                                                  Query Match

0.4%; Score 20; DB
Best Local Similarity 100.0%; Pred. No. 2.6
Matches 20; Conservative 0; Mismatches
                                                                                                                                                                      4166 TGATTGCAGCTGTTCAGGGC 4185
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 4309 AGTCCTGCAGATGGAAATCC 4328
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           4397 ATGTTGTTGCAGGAAGTACT 4416
                                                                                                                                                                                                              1 rearrecaecrerrcaegec 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Query Match
Best Local Similarity 100.0
Matches 20, Conservative
) ORGANISM: H. sapiens
; FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ORGANISM: H. Bapiens
FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ORGANISM: H. Bapiens
FEATURE:
                                                                                                                                                                                                                                                                                                   US-10-160-786-140
                                        US-10-160-786-139
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    US-10-160-786-140
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              US-10-160-786-141
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   RESULT 267
US-10-160-786-142
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TYPE: DNA
                                                                                                                                                                      ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ઠે
        Sequence 137, Application US/10160786
GENERAL INFORMATION:
TENERAL INFORMATION:
TITLE OF INVENTION: P150 EXPRESSION
FILE REFERENCE: RS-0376
CURRENT APPLICATION NUMBER: US/10/160,786
CURRENT FILING DATE: 2002-05-31
NUMBER OF SEQ ID NOS: 147
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Sequence 138, Application US/10160786

Publication No. US20030225013A1

GENERAL INFORMATION:
APPLICANT: Studen M. Freier
APPLICANT: Kenneth W. Dobie
TITLE OF INVENTION: PL50 EXPRESSION
FILE REFERENCE: RTS-0376
CURRENT APPLICATION UNMER: US/10/160,786
CURRENT FILING DATE: 2002-05-31
NUMBER OF SEQ ID NOS: 147
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Sequence 139, Application US/10160786

Publication No. US20030225013A1

GENERAL INFORMATION:
APPLICANT: Susan M. Freier
APPLICANT: Kenneth W. Dobie
TITLE OF INVENTION: PLSO EXPRESSION
FILE REFERENCE: RTS-0376
CURRENT APPLICATION NUMBER: US/10/160,786
CURRENT FILING DATE: 2002-05-31
NUMBER OF SEQ ID NOS: 147
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                   ö
                                                                                                                                                                                                                                                                                                                                                                                                    0.4%; Score 20; DB 1; Length 20; 100.0%; Pred. No. 2.6e+02; Live 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 0.4%; Score 20; DB 1; Length 20;
100.0%; Pred. No. 2.6e+02;
iive 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         3991 GGCCTCATCACTTCCTTTGC 4010
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     4050 CAGTGGTACCATGGCTTGTT 4069
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Query Match
Best Local Similarity 100.(
Matches 20; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                      Best Local Similarity 100.
Matches 20; Conservative
                                                                                                                                                                                                                                                                                            TYPE: DNA
ORGANISM: H. sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TYPE: DNA
ORGANISM: H. sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               RESULT 263
US-10-160-786-138
                                                                                                                                                                                                                                                                                                                                                        US-10-160-786-137
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       US-10-160-786-138
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         RESULT 264
US-10-160-786-139
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              SEQ ID NO 138
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           SEQ ID NO 139
LENGTH: 20
                                                                                                                                                                                                                                                                                                                                                                                                    Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Q
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ઠે
```

ö

```
WS-10-160-786-145

| Sequence 145, Application US/10160786
| Sequence 145, Application US/10160786
| Publication No. US20030225013A1
| Publication No. US20030225013A1
| GENERAL INFORMATION: Freir
| APPLICANT: Susan M. Freir
| APPLICANT: Susan M. Dobie
| TITLE OF INVENTION: ANTISENSE MODULATION OF PHOSPHOINOSITIDE-3-KINASE, REGULATORY SUBL.
| TITLE OF INVENTION: P150 EXPRESSION
| TITLE OF INVENTION: P150 EXPRESSION
| TITLE OF INVENTION: P150 EXPRESSION
| CURRENT APPLICATION NUMBER: US/10/160,786
| CURRENT FILING DATE: 2002-05-31
| SEQ ID NO 145
| SEQ ID NO 145
| LENGTH: 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            US-10-160-786-146

US-10-160-786-146

Sequence 146, Application US/10160786

Publication No. US20030225013A1

GENERAL INFORMATION:

APPLICANT: Susan M. Freier

APPLICANT: Kenneth W. Dobie

TITLE OF INVENTION: ANTISENSE MODULATION OF PHOSPHOINOSITIDE-3-KINASE, REGULATORY SUB:

TITLE OF INVENTION: P150 EXPRESSION

TITLE OF INVENTION: P150 EXPRESSION

TITLE OF INVENTION: P150 EXPRESSION

CURRENT APPLICATION NUMBER: US/10/160,786

CURRENT PILING DATE: 2002-05-31

NUMBER OF SEQ ID NOS: 147

SEQ ID NO 146

LENGTH: 20

"ENGTH: 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ö
                                                                                      ö
                                                                                        Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ö
                                                                                        ;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ô
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Length 20;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Indels
                                            0.4%; Score 20; DB 1; Length 20;
100.0%; Pred. No. 2.6e+02;
tive 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Length 20;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           0.4%; Score 20; DB 1; L6
100.0%; Pred. No. 2.6e+02;
iive 0; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           DB 1; Le 2.6e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Query Match 0.4%; Score 20; DB Best Local Similarity 100.0%; Pred. No. 2.6 Matches 20; Conservative 0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   RESULT 272
US-10-160-786-147
; Sequence 147, Application US/10160786
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             4792 CAAAATGGTTAAGATGTACT 4811
                                                                                                                              4761 CTGTTTCATGACTGACTGAC 4780
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           4776 CTGACTAAATGACACCCAAA 4795
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1 creacraaardacacccaaa 20
                                                                                                                                                                         1 crerrrcardacreacreac 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           20; Conservative
                                                                       Best Local Similarity 100.
Matches 20; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TYPE: DNA ORGANISM: H. sapiens FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ORGANISM: H. sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Query Match
Best Local Similarity
Matches 20; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               US-10-160-786-146
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         US-10-160-786-145
; FEATURE:
US-10-160-786-144
                                                             Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         d
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   엄
                                                                                                                                           ò
                                                                                                                                                                             셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CENERAL INFORMATION:
CENERAL INFORMATION:
CENERAL INFORMATION:
CENERAL INFORMATION:
CENERAL INFORMATION:
CENERAL INFORMATION:
APPLICANT: Susan M. Freier
APPLICANT: Kenneth W. Dobie
TITLE OF INVENTION: ANTISENSE MODULATION OF PHOSPHOINOSITIDE-3-KINASE, REGULATORY SUBTITLE REFRENCE: FIS-0376
CURRENT APPLICATION NUMBER: US/10/160,786
CURRENT FILING DATE: 2002-05-31
NUMBER OF SEQ ID NOS: 147
SEQ ID NO 143
LENGTH: 20
                                                      APPLICANT: Susan M. Freier
APPLICANT: Susan M. Freier
APPLICANT: Susan M. Pobie
TITLE OF INVENTION: ANTISENSE MODULATION OF PHOSPHOINOSITIDE-3-KINASE, REGULATORY SUB
TITLE OF INVENTION: P150 EXPRESSION
FILE REFERENCE: RTS-0376
CURRENT APPLICATION NUMBER: US/10/160,786
CURRENT FILING DATE: 2002-05-31
NUMBER OF SEQ ID NOS: 147
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ö
                                                                                                                                                                                                                                                                                                                                                                                                           ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Gaps
                                                                                                                                                                                                                                                                                                                                                                                                           Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ö
                                                                                                                                                                                                                                                                                                                                                                                                           .;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Query Match 0.4%; Score 20; DB 1; Length 20; Best Local Similarity 100.0%; Pred. No. 2.6e+02; Matches 20; Conservative 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                   0.4%; Score 20; DB 1; Length 20; 100.0%; Pred. No. 2.6e+02;
                                                                                                                                                                                                                                                                                                                                                                                   100.0%; Pred. ...
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           4633 GIGIGGAAATAAAACCTACT 4652
                                                                                                                                                                                                                                                                                                                                                                                                                                                       4424 CATCTGTGTCCTACTACAGG 4443
      Sequence 142, Application US/10160786 Publication No. US20030225013A1 GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1 Greregaariaaaccracr 20
                                                                                                                                                                                                                                                                                                                                                                                                                 20; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TYPE: DNA
ORGANISM: H. sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TYPE: DNA ORGANISM: H. sapiens
                                                                                                                                                                                                                                                                          TYPE: DNA
ORGANISM: H. sapiens
                                                                                                                                                                                                                                                                                                                                                                           Query Match
Best Local Similarity
Matches 20; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         US-10-160-786-143
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               US-10-160-786-143
                                                                                                                                                                                                                                                                                                                                     US-10-160-786-142
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            SEQ ID NO 144
LENGTH: 20
                                                                                                                                                                                                                                  SEQ ID NO 142
LENGTH: 20
                                                                                                                                                                                                                                                                                                                  FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 LENGTH:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               B
```

```
Sequence 13, Application US/10667022

Sequence 13, Application US/10667022

Publication No. US20040063657A1

GENERAL INFORMATION:

APPLICANT: Susan M. Freier

APPLICANT: Kenneth W. Dobie

TITLE OF INVENTION: ANTISENSE MODULATION OF PHOSPHOINOSITIDE-3-KINASE, REGULATORY SUBI

TITLE OF INVENTION: P150 EXPRESSION

FILE REFERENCE: RTS-0376

CURRENT APPLICATION NUMBER: US/10/667,022

CURRENT FILING DATE: 2003-09-18

NUMBER OF SEQ ID NOS: 147

LENGTH: 20

LENGTH: 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              RESULT 276
US-10-667-022-14/C
US-10-667-022-14/C
Sequence 14, Application US/10667022
Spublication No. US20040063657A1
GENERAL INFORMATION:
GENERAL INFORMATION:
APPLICANT: Susan M. Freier
APPLICANT: Kenneth W. Dobie
TITLE OF INVENTION: ANTISENSE MODULATION OF PHOSPHOINOSITIDE-3-KINASE, REGULATORY SUBITIVE OF INVENTION: P150 EXPRESSION
TITLE REFERENCE: RTS-0376
CURRENT APPLICATION NUMBER: US/10/667,022
CURRENT FILING DATE: 2003-09-18
SEQ ID NOS: 147
LENGTH: 20
                                                                                                                                             Gape
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Gapa
                                                                                                                                             ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Query Match 0.4%; Score 20; DB 1; Length 20; Best Local Similarity 100.0%; Pred. No. 2.6e+02; Matches 20; Conservative 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Length 20;
                                                                                                 Length 20;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Query Match 0.4%; Score 20; DB 1; Length 20; Best Local Similarity 100.0%; Pred. No. 2.6e+02; Matches 20; Conservative 0; Mismatches 0; Indels
                                                                                                                                             Indels
                                                                             DB 1; Lens.
1. 2.6e+02;
0;
                          ; OTHER INFORMATION: Antisense Oligonucleotide US-10-667-022-12
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ; OTHER INFORMATION: Antisense Oligonucleotide US-10-667-022-13
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ; OTHER INFORMATION: Antisense Oligonuclectide US-10-667-022-14
                                                                                               Query Match 0.4%; Score 20; DB Best Local Similarity 100.0%; Pred. No. 2.6 Matches 20; Conservative 0; Mismatches
                                                                                                                                                                                           92 cegrorecactrorocce 111
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     377 AGCCCATCTCCTGTCTATGA 396
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               391 CTATGAAGAAGACCCTTCG 410
                                                                                                                                                                                                                                    20 cedrerecacirerereces 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               20 AGCCCATCTCCTGTCTATGA 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           20 crargaagaagaccrrcg 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ORGANISM: Artificial Sequence FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TYPE: DNA
ORGANISM: Artificial Sequence
                                                                                                                                                                                                                                                                                                           RESULT 275
US-10-667-022-13/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TYPE: DNA
       ; FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             FEATURE:
                                                                                                                                                                                           δ
                                                                                                                                                                                                                                    셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Sequence 12, Application US/10667022

Publication No. US20040063657A1

GENERAL INFORMATION:
GENERAL INFORMATION:
GENERAL INFORMATION:
Freier
APPLICANT: Stands M. Dobie
TITLE OF INVENTION: P150 EXPRESSION
FILE REFERENCE: RTS-0376
CURRENT APPLICATION NUMBER: US/10/667,022
CURRENT FILING DATE: 2003-09-18
NUMBER OF SEQ ID NOS: 147
SEQ ID NO 12
LENGTH: 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             APPLICANT: Susan M. Freier
APPLICANT: Susan M. Preier
APPLICANT: Kenneth W. Dobie
TITLE OF INVENTION: ANTISENSE MODULATION OF PHOSPHOINOSITIDE-3-KINASE, REGULATORY SUS
TITLE OF INVENTION: P150 EXPRESSION
FILE REFERENCE: RTS-0376
CURRENT APPLICATION NUMBER: US/10/667,022
CURRENT FILING DATE: 2003-09-18
SEQ ID NO 11
LENGTH: 20
                                         APPLICANT: Sugan M. Freier
APPLICANT: Sugan M. Freier
APPLICANT: Kenneth W. Dobie
TITLE OF INVENTION: PLSO EXPRESSION
FILE REFERENCE: RTS-0376
CURRENT APPLICATION NUMBER: US/10/160,786
CURRENT FILING DATE: 2002-05-31
NUMBER OF SEQ ID NOS: 147
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                      Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                      ö
                                                                                                                                                                                                                                                                                                                                                                                                Query Match 0.4%; Score 20; DB 1; Length 20; Best Local Similarity 100.0%; Pred. No. 2.6e+02; Matches 20; Conservative 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Length 20;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Query Match
0.4%; Score 20; DB 1; L
Best Local Similarity 100.0%; Pred. No. 2.6e+02;
Matches 20; Conservative 0; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ; OTHER INFORMATION: Antisense Oligonucleotide US-10-667-022-11
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               4823 CTTATGCATCTCTTTGCAAG 4842
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ; Sequence 11, Application US/10667022; Publication No. US20040063657A1; GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         43 CGTTTGCTGGGGCTGCAGCA 62
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       20 CGTTTGCTGGGGCTGCAGCA 1
Publication No. US20030225013A1
GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ORGANISM: Artificial Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TYPE: DNA ORGANISM: Artificial Sequence
                                                                                                                                                                                                                                                                                TYPE: DNA
ORGANISM: H. sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         RESULT 274
US-10-667-022-12/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               RESULT 273
US-10-667-022-11/c
                                                                                                                                                                                                                                                                                                                                                     US-10-160-786-147
                                                                                                                                                                                                                                  SEQ ID NO 147
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CYPE: DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ઠે
```

ö

```
APPLICANT: Susan M. Freier
APPLICANT: Susan M. Preier
APPLICANT: Susan M. Preier
TITLE OF INVENTION: ANTISENSE MODULATION OF PHOSPHOINOSITIDE-3-KINASE, REGULATORY SUBL.
TITLE OF INVENTION: P150 EXPRESSION
TITLE OF INVENTION: P150 EXPRESSION
TITLE OF INVENTION: P150 EXPRESSION
CURRENT APPLICATION NUMBER: US/10/667,022
CURRENT FILING DATE: 2003-09-18
SEQ ID NOS: 147
LENGTH: 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Sequence 19, Application US/10667022

Publication No. US20040063657A1

GENERAL INFORMATION:

APPLICANT: Susan M. Freier

APPLICANT: Kenneth W. Dobie

TITLE OF INVENTION: ANTISENSE MODULATION OF PHOSPHOINOSITIDE-3-KINASE, REGULATORY SUB-
TITLE OF INVENTION: P150 EXPRESSION
FILE REFERENCE: RTS-0376

CURRENT APPLICATION NUMBER: US/10/667,022

CURRENT APPLICATION NUMBER: 2003-09-18

NUMBER OF SEQ ID NOS: 147

SEQ ID NO 19
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ö
                                                                                                                                                                                                                                       ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Gaps
                                                                                                                                                                                                                                       Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ö
                                                                                                                                                                                                                                       ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Query Match 0.4%; Score 20; DB 1; Length 20; Best Local Similarity 100.0%; Pred. No. 2.6e+02; Matches 20; Conservative 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Length 20;
                                                                                                                                                                                          Length 20;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Indels
                                                                                                                                                                                                                                       Indels
                                                                                                                                                                                       Query Match
0.4%; Score 20; DB 1; Lv
Best Local Similarity 100.0%; Pred. No. 2.6e+02;
Matches 20; Conservative 0; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Query Match
0.4%; Score 20; DB 1; L
Best Local Similarity 100.0%; Pred. No. 2.6e+02;
Matches 20; Conservative 0; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ; OTHER INFORMATION: Antisense Oligonucleotide US-10-667-022-19
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ; OTHER INFORMATION: Antisense Oligonucleotide US-10-667-022-18
                                                                                                   FEATURE:
; OTHER INFORMATION: Antisense Oligonucleotide
US-10-667-022-17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    703, CGAGAAGGCCTGGTCGTTGT 722
                                                                                                                                                                                                                                                                                                                                                                                                                                                     Sequence 18, Application US/10667022; Publication No. US20040063657A1; GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        631 GATATTCATGACTTTGAATA 650
                                                                                                                                                                                                                                                                                           559 CITGCCATTATGGGAAATCA 578
                                                                                                                                                                                                                                                                                                                      20 CTTGCCATTATGGGAAATCA 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TYPE: DNA
ORGANISM: Artificial Sequence
       SEQ ID NO 17
LENGTH: 20
TYPE: DNA
ORGANISM: Artificial Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ORGANISM: Artificial Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    US-10-667-022-19/c
                                                                                                                                                                                                                                                                                                                                                                                                                RESULT 280
US-10-667-022-18/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TYPE: DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                LENGTH:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ð
                                                                                                                                                                                                                                                                                                à
                                                                                                                                                                                                                                                                                                                                          셤
RESULT 277
US-10-667-022-15/c
US-10-667-022-15/c
Sequence 15, Application US/10667022
Publication No. US20040063657A1
Sequence 15, Application US/10667022
Publication No. US20040063657A1
APPLICANT: Susan M. Freier
APPLICANT: Seneth W. Dobie
TITLE OF INVENTION: ANTISENSE MODULATION OF PHOSPHOINOSITIDE-3-KINASE, REGULATORY SUBTITLE OF INVENTION: P150 EXPRESSION
TITLE OF INVENTION: P150 EXPRESSION
FILE REPERENCE: RTS-0376
CURRENT FILING DATE: 2003-09-18
NUMBER OF SEQ ID NOS: 147
SEQ ID NO 15
LENGTH: 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Sequence 16, Application US/10667022

Publication No. US2004063657A1

GENERAL INFORMATION:
APPLICANT: Susan M. Freier
APPLICANT: Kenneth W. Dobie
TITLE OF INVENTION: ANTISENSE MODULATION OF PHOSPHOINOSITIDE-3-KINASE, REGULATORY SUBTILLE OF INVENTION: ANTISENSE MODULATION OF PHOSPHOINOSITIDE-3-KINASE, REGULATORY SUBTILE REPRENCE: RTS-0376
CURRENT APPLICATION NUMBER: US/10/667,022
CURRENT FILING DATE: 2003-09-18
NUMBER OF SEQ ID NOS: 147

ERNGTH: 20

LENGTH: 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           SUE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   MS-010-667-022-17/c

Sequence 17, Application US/10667022

Sequence 17, Application US/10667022

Publication No. US20040063657A1

PUBLICANT: Susan M. Freier

APPLICANT: Kenneth W. Dobie

TITLE OF INVENTION: P150 EXPRESSION

TITLE OF INVENTION: P150 EXPRESSION

FILE REFREENCE: RTS-0376

CURRENT APPLICATION NUMBER: US/10/667,022

CURRENT PILING DATE: 2003-09-18

NUMBER OF SEQ ID NOS: 147
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Query Match

0.4%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 2.6e+02;
Matches 20; Conservative 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Length 20;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Query Match
0.4%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 2.6e+02;
Matches 20; Conservative 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           OTHER INFORMATION: Antisense Oligonucleotide
                                                                                                                                                                                                                                                                                                                                                                                                                                           . OTHER INFORMATION: Antisense Oligonucleotide US-10-667-022-15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               534 AACCTTACTAAAGACCACAG 553
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               486 CCTCTGAACGATTTTGACAC 505
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         20 AACCTTACTAAAGACCACAG 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TYPE: DNA ORGANISM: Artificial Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      RESULT 278
US-10-667-022-16/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      US-10-667-022-16
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    RESULT 279
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      8
```

```
Sequence 23, Application US/10667022
Publication No. US20040063657A1
GENERAL INFORMATION:
APPLICANT: Susan M. Freier
APPLICANT: Kenneth W. Dobie
TITLE OF INVENTION: ANTISENSE MODULATION OF PHOSPHOINOSITIDE-3-KINASE, REGULATORY SUBILITIES OF INVENTION: ANTISENSE MODULATION OF PHOSPHOINOSITIDE-3-KINASE, REGULATORY SUBILITIES OF INVENTION: P160 EXPRESSION
FILE REPERENCE: RTS-0376
CURRENT APPLICATION NUMBER: US/10/667,022
CURRENT FILING DATE: 2003-09-18
NUMBER OF SEQ ID NOS: 147
SEQ ID NO 23
LENGTH: 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Sequence 24, Application US/10667022
Publication No. US20040063657A1
GENERAL INFORMATION:
APPLICANT: Susan M Freier
APPLICANT: Kenneth W. Dobie
TITLE OF INVENTION: ARTISENSE MODULATION OF PHOSPHOINOSITIDE-3-KINASE, REGULATORY SUBI
TITLE OF INVENTION: PLSO EXPRESSION
FILE REFERENCE: RTS-0376
CURRENT APPLICATION NUMBER: US/10/667,022
CURRENT FILING DATE: 2003-09-18
NUMBER OF SEQ ID NOS: 147
SEQ ID NO 24
LENGTH: 20
                                                                                                                                                                                                                                                                                                                                                 ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ô
                                                                                                                                                                                                                                                                                                                                                 Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Gaps
                                                                                                                                                                                                                                                                                                                                                 ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ö
                                                                                                                                                                                                                                                                                            ch 0.4%; Score 20; DB 1; Length 20; 1 Similarity 100.0%; Pred. No. 2.6e+02; 20; Conservative 0; Mismatches 0; Indele
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Query Match 0.4%; Score 20; DB 1; Length 20; Best Local Similarity 100.0%; Pred. No. 2.6e+02; Matches 20; Conservative 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  0.4%; Score 20; DB 1; Length 20;
                                                                                                                                                                                                                       ) OTHER INFORMATION: Antisense Oligonucleotide US-10-667-022-22
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          FEATURE:
COTHER INFORMATION: Antisense Oligonucleotide
US-10-667-022-23
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ; OTHER INFORMATION: Antisense Oligonucleotide
US-10-667-022-24
FILE REFERENCE: RTS-0376
CURRENT APPLICATION NUMBER: US/10/667,022
CURRENT FILING DATE: 2003-09-18
NUMBER OF SEQ ID NOS: 147
SEQ ID NO 22
LENGTH: 20
LENGTH: 20
TYPE: DNA
ORGANISM: Artificial Sequence
                                                                                                                                                                                                                                                                                                                                                                                                  824 CTTTCCAGAAAGCATCAGAA 843
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 875 GGCAGTATGTGCGAGACAAT 894
                                                                                                                                                                                                                                                                                                                                                                                                                              20 CTTTCCAGAAGCATCAGAA 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ORGANISM: Artificial Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TYPE: DNA ORGANISM: Artificial Sequence FEATURE:
                                                                                                                                                                                                                                                                                                                     Best Local Similarity
Matches 20; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 JS-10-667-022-23/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 US-10-667-022-24/c
                                                                                                                                                                                                                                                                                                 Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TYPE: DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Query Match
                                                                                                                                                                                                     FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          RESULT 286
                                                                                                                                                                                                                                                                                                                                                                                                  à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ð
                                                                                                                                     Sequence 20, Application US/10667022
Publication No. US20040063657A1
GENERAL INFORMATION:
APPLICANT: Susan M. Freier
APPLICANT: Kenneth W. Dobie
TITLE OF INVENTION: PLSO EXPRESSION
TITLE OF INVENTION: PLSO EXPRESSION
FILE REFERENCE: RTG-0376
CURRENT APPLICATION NUMBER: US/10/667,022
CURRENT PILING DATE: 2003-09-18
NUMBER OF SEQ ID NOS: 147
SEQ ID NO 20
LENGTH: 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sequence 21, Application US/10667022
Sequence 21, Application US/10667022
Publication No. US20040063657A1
GENERAL INFORMATION:
APPLICANT: Susan M. Freier
APPLICANT: Kenneth W. Dobie
TITLE OF INVENTION: PISO EXPRESSION
FILE REFERENCE: RTS-0376
CURRENT APPLICATION NUMBER: US/10/667,022
CURRENT FILING DATE: 2003-09-18
NUMBER OF SEQ ID NOS: 147
SEQ ID NO 21
LENGTH: 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ; Sequence 22, Application US/10667022;
; Publication No. US20040063557A1
; GENERAL INFORMATION:
; APPLICANT: Susan M. Freier
; THILE OF INVENTION: ATTISENSE MODULATION OF PHOSPHOINOSITIDE-3-KINASE, REGULATORY SUB
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Query Match

0.4%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 2.6e+02;
Matches 20; Conservative 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Query Match 0.4%; Score 20; DB 1; Length 20; Best Local Similarity 100.0%; Pred. No. 2.6e+02; Matches 20; Conservative 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          , OTHER INFORMATION: Antisense Oligonucleotide US-10-667-022-20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               FEATURE: OTHER INFORMATION: AntiBense Oligonucleotide
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   726 GGTTTTTGCAATTCAGGATC 745
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       780 GGAGGAACTGAAAATCAGGC 799
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   20 GGTTTTTGCAATTCAGGATC 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        20 GGAGGAACTGAAAATCAGGC 1
                       ceacaacccreercerrer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TYPE: DNA ORGANISM: Artificial Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TYPE: DNA
ORGANISM: Artificial Sequence
                                                                                                                        US-10-667-022-20/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           RESULT 283
US-10-667-022-21/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          RESULT 284
US-10-667-022-22/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     US-10-667-022-21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     FEATURE:
                       셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ð
```

```
APPLICANT: Kenneth W. Dobie
TITLE OF INVENTION: ANTISENSE MODULATION OF PHOSPHOINOSITIDE-3-KINASE, REGULATORY SUBLITILE OF INVENTION: P150 EXPRESSION
TITLE OF INVENTION: P150 EXPRESSION
TITLE OF INVENTION: P150 EXPRESSION
CURRENT APPLICATION NUMBER: US/10/667,022
CURRENT FILING DATE: 2003-09-18
SEQ ID NOS: 147
SEQ ID NO 27
LENGTH: 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            US-10-667-022-29/C

Sequence 29, Application US/10667022

Sequence 29, Application US/10667022

Sequence 29, Application OS US20040063657A1

Sequence 29, Application No. US20040063657A1

GENERAL INFORMATION:

APPLICANT: Seneth W. Dobie

TITLE OF INVENTION: P150 EXPRESSION

TITLE OF INVENTION INVENTION

TITLE OF INVENTION INVENTION

TITLE OF INVENTION

TITLE OF INVENTION

TITLE OF INVENTION

TITLE OF INVENTION

TITL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            .
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Length 20;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Length 20;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Query Match
0.4%; Score 20; DB 1; Le
Best Local Similarity 100.0%; Pred. No. 2.6e+02;
Matches 20; Conservative 0; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             0.4%; Score 20; DB 1; Le
100.0%; Pred. No. 2.6e+02;
tive 0; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  FEATURE:
; CTHER INFORMATION: Antisense Oligonucleotide
US-10-667-022-28
                                                                                                                                                                                                                                                                                                                                                                                     CTHER INFORMATION: Antisense Oligonucleotide US-10-667-022-27
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1083 CACTTATCTTCCAGAGACA 1102
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1032 GGTCACCAGTTGGAATTGGG 1051
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   20 CACTTATCTTCCAGAGACA 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          20 GGTCACCAGTTGGAATTGGG 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TYPE: DNA
ORCANISM: Artificial Sequence
PEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TYPE: DNA
ORGANISM: Artificial Sequence
                                                                                                                                                                                                                                                                                                          TYPE: DNA ORGANISM: Artificial Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Query Match 0.4
Best Local Similarity 100.
Matches 20; Conservative
                                                                                                                                                                                                                                                                                                                                                                      FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 RESULT 291
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Š
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Sequence 26, Application US/10667022

Sequence 26, Application US/10667022

Publication No. US20040063657A1

GENERAL INFORMATION:
APPLICANT: Naman M. Freier

APPLICANT: Remeth W. Dobie
TITLE OF INVENTION: ANTISENSE MODULATION OF PHOSPHOINOSITIDE-3-KINASE, REGULATORY SUBTITE OF INVENTION: P150 EXPRESSION
TITLE OF INVENTION: P150 EXPRESSION
TITLE OF PREFERENCE: RTS-0376
CURRENT APPLICATION NUMBER: US/10/667,022
CURRENT FILING DATE: 2003-09-18
NUMBER OF SEQ ID NOS: 147

SEQ ID NO 26
LENGTH: 20
                                                                                                                                                                                                                                                                                                                                                                                               APPLICANT: Susan M. Freier
APPLICANT: Kenneth W. Dobie
TITLE OF INVENTION: ANTISENSE MODULATION OF PHOSPHOINOSITIDE-3-KINASE, REGULATORY SUE
TITLE OF INVENTION: P150 EXPRESSION
FILE REFERENCE: RTS-0376
CURRENT APPLICATION NUMBER: US/10/667,022
CURRENT FILING DATE: 2003-09-18
NUMBER OF SEQ ID NOS: 147
SEQ ID NO 25
LENGTH: 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ö
                                           ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Gaps
                                           Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ;
0
                                           .;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Query Match
0.4%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 2.6e+02;
Matches 20; Conservative 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   0.4%; Score 20; DB 1; Length 20;
100.0%; Pred. No. 2.6e+02;
ive 0; Mismatches 0; Indels
                                               Indels
                  100.0%; Pred. No. 2.6e+02; cive 0; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ; OTHER INFORMATION: Antisense Oligonucleotide
US-10-667-022-26
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ) OTHER INFORMATION: Antisense Oligonucleotide US-10-667-022-25
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      998 TTCGTCATGGGGACATCAAG 1017
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          RESULT 289
US-10-667-022-27/C
'Sequence 27, Application US/10667022
'Publication No. US20040063657Al
'GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                982 GCACACAATCTGGAGTTCG 1001
                                                                                                                                                                                                                                                                                          US-10-667-022-25/c; Sequence 25, Application US/10667022; Publication No. US20040063657Al; GENERAL INFORMATION:
                                                                                                          914 CCCGTCCATTCTTGAATAAC 933
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               20 TTCGTCATGGGGACATCAAG 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   20 GCACACAAATCTGGAGTTCG 1
                                                                                                                                          20 CCCGTCCATTCTTGAATAAC 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TYPE: DNA ORGANISM: Artificial Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TYPE: DNA
ORGANISM: Artificial Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Query Match 0.4%;
Best Local Similarity 100.0%
Matches 20; Conservative
                         Best Local Similarity 100.
Matches 20; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       RESULT 288
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          à
                                                                                                                                                                         d
```

gibbs-10-667-022-4.rnpb

```
Sequence 3.2, Application US/10667022
Publication No. US20040063657A1
GREEAL INFORMATION:
GREEAL INFORMATION:
APPLICANT: Susan M. Freier
APPLICANT: Kenneth W. Dobie
TITLE OF INVENTION: P150 EXPRESSION
FITE OF INVENTION: P150 EXPRESSION
FILE REFERENCE: R7S-0376
CURRENT APPLICATION NUMBER: US/10/667,022
CURRENT FILING DATE: 2003-09-18
NUMBER OF SEQ ID NOS: 147
SEQ ID NO 32
LENGTH: 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Sequence 33, Application US/10667022
Publication No. US20040063657A1
Publication No. US20040063657A1
Publication No. US20040063657A1
REBERATION:
APPLICANT: SUBBLE NO. Dobie
TITLE OF INVENTION: ANTISENSE MODULATION OF PHOSPHOINOSITIDE-3-KINASE, REGULATORY SUBITILIE OF INVENTION: PISO EXPRESSION
FILE REFERENCE: RTS-0376
CURRENT APPLICATION NUMBER: US/10/667,022
CURRENT PILING DATE: 2003-09-18
NUMBER OF SEQ ID NOS: 147
SEQ ID NO 33
LENGTH: 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Sequence 34, Application US/10667022
Publication No. US20040063657A1
GENERAL INFORMATION:
GENERAL INFORMATION:
APPLICANT: Susan M. Freier
APPLICANT: Susan M. Freier
APPLICANT: Renneth W. Dobie
TITLE OF INVENTION: ANTISENSE MODULATION OF PHOSPHOINOSITIDE-3-KINASE, REGULATORY SUBITILE OF INVENTION: PISO EXPRESSION
FILE REFERENCE: RTS-0376
CURRENT APPLICATION NUMBER: US/10/667,022
CURRENT FILING DATE: 2003-09-18
NUMBER OF SEQ ID NOS: 147
SEQ ID NO 34
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Length 20;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Length 20;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    IndelB
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       IndelB
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 0.4%; Score 20; DB 1; Le
100.0%; Pred. No. 2.6e+02;
tive 0; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Query Match
0.4%; Score 20; DB 1; Lv
Best Local Similarity 100.0%; Pred. No. 2.6e+02;
Matches 20; Conservative 0; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                           , OTHER INFORMATION: AntiBense Oligonucleotide US-10-667-022-32
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ) OTHER INFORMATION: Antisense Oligonucleotide US-10-667-022-33
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1299 AGGTTGTGTGATAGCTGAGC 1318
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1337 CATTATTTGATCTCTCAA 1356
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      20 AGGTTGTGTGATAGCTGAGC 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           20 CATTATTTGATCTCTCTCAA 1
                                                                                                                                                                                                                                                                                                                                                      TYPE: DNA ORGANISM: Artificial Seguence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TYPE: DNA ORGANISM: Artificial Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Query Match
Best Local Similarity 100.
Matches 20; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           RESULT 295
US-10-667-022-33/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          US-10-667-022-34/c
       JS-10-667-022-32/c
                                                                                                                                                                                                                                                                                                                                                                                                      FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ઠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      셤
                                                                                                                                                                                                                                                                                                                                         Sequence 30. Application US/10667022
| Sequence 30. Application US/10667022
| Publication No. US20040063657A1
| General information:
| APPLICANT: Susan M. Freier
| APPLICANT: Kenneth W. Dobie
| TITLE OF INVENTION: ANTISENSE MODULATION OF PHOSPHOINOSITIDE-3-KINASE, REGULATORY SUB-
| TITLE OF INVENTION: PLSO BYPRESSION |
| FILE REFERENCE: RTS-0376
| CURRENT APPLICATION UNDER: US/10/667,022
| CURRENT FILING DATE: 2003-09-18
| NUMBER OF SEQ ID NOS: 147
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Sequence 31, Application US/10667022
Sequence 31, Application US/10667022
Sequence 31, Application US/10667022
Sequence 31, Application US/10667022
Sequence 31, Application OS/10667022
Sequence 31, Application OS/10667022
SETILE SEPRENCE: Sequence May Dobie
STITLE OF INVENTION: ANTISENSE MODULATION OF PHOSPHOINOSITIDE-3-KINASE, REGULATORY SUB-
STILE OF INVENTION: P150 EXPRESSION
FILE REFERENCE: RTS-0376
CURRENT FILING DATE: 2003-09-18
NUMBER OF SEQ ID NOS: 147
SEQ ID NO 31
LENGTH: 20
                                                                                                                              ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ö
                                                                                                                              Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ö
                                                                                                                              ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ö
                                                                        Query Match 0.4%; Score 20; DB 1; Length 20; Best Local Similarity 100.0%; Pred. No. 2.6e+02; Matches 20; Conservative 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Query Match

0.4%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 2.6e+02;
Matches 20; Conservative 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             0.4%; Score 20; DB 1; Length 20;
100.0%; Pred. No. 2.6e+02;
tive 0; Mismatches 0; Indels
; OTHER INFORMATION: Antisense Oligonucleotide
US-10-667-022-29
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                OTHER INFORMATION: Antisense Oligonucleotide
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  OTHER INFORMATION: Antisense Oligonucleotide
                                                                                                                                                                         1115 TCAATTATTTCTTTGACACA 1134
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1215 AGATCCTTCAACTCCGCTTG 1234
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1268 AGTTGAAGAGAGCAATGGAC 1287
                                                                                                                                                                                                                        20 rcaarrarrrcrrrgacaca 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          20 AGATCCTTCAACTCCGCTTG 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              20 AGTTGAAGAGAGCAATGGAC 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TYPE: DNA ORGANISM: Artificial Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TYPE: DNA
ORGANISM: Artificial Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                20; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Best Local Similarity
Matches 20; Conserva
                                                                                                                                                                                                                                                                                                                         US-10-667-022-30/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            US-10-667-022-30
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               US-10-667-022-31
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Query Match .
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         SEQ ID NO 30
LENGTH: 20
                                                                                                                                                                                                                                                                                                  RESULT 292
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       RESULT 293
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        RESULT 294
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        셤
                                                                                                                                                                         ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ઠે
```

```
Sequence 37, Application US/10667022

Sequence 37, Application US/10667022

Publication No. US20040063657A1

GENERAL INFORMATION:
APPLICANT: Susan M. Freier
APPLICANT: Kenneth W. Dobie
TITLE OF INVENTION: ANTISENSE MODULATION OF PHOSPHOINOSITIDE-3-KINASE, REGULATORY SUBLETILE OF INVENTION: P150 EXPRESSION
TITLE OF INVENTION: P20 EXPRESSION
CURRENT PELLOCATION NUMBER: US/10/667,022
CURRENT FILING DATE: 2003-09-18

NUMBER OF SEQ ID NOS: 147
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            APPLICANT: Susan M. Freier
APPLICANT: Susan M. Preier
APPLICANT: Susan M. Preier
TITLE OF INVENTION: ANTISENSE MODULATION OF PHOSPHOINOSITIDE-3-KINASE, REGULATORY SUBULATION: P150 EXPRESSION
TITLE OF INVENTION: P150 EXPRESSION
TITLE OF INVENTION: P150 EXPRESSION
TITLE OF INVENTION: P150 EXPRESSION
CURRENT APPLICATION NUMBER: US/10/667,022
CURRENT APPLICATION NUMBER: 2003-09-18
SEQ ID NOS: 147
LENGTH: 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Sequence 39, Application US/10667022
Publication No. US20040063657A1
GENERAL INFORMATION:
APPLICANT: Susan M. Freier
APPLICANT: Kenneth W. Dobie
TITLE OF INVENTION: PAIS EXPRESSION
FILE OF INVENTION: P150 EXPRESSION
FILE REFERENCE: RIS-0376
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Length 20;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Length 20;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Query Match 0.4%; Score 20; DB 1; Le:
Best Local Similarity 100.0%; Pred. No. 2.6e+02;
Matches 20; Conservative 0; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   0.4%; Score 20; DB 1; Le
100.0%; Pred. No. 2.6e+02;
tive 0; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     OTHER INFORMATION: Antisense Oligonucleotide
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ), OTHER INFORMATION: Antisense Oligonucleotide US-10-667-022-37
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1529 ACACTTTTCTTCAGCCCTAC 1548
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1513 TTTCCTGAAATATTTTACAC 1532
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Sequence 38, Application US/10667022 Publication No. US20040063657A1 GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TTTCCTGAATATTTTACAC 1
20 CAGCGTGGCAATGCCTTTCC 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TYPE: DNA ORGANISM: Artificial Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ORGANISM: Artificial Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Query Match 0.4
Best Local Similarity 100.
Matches 20, Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    US-10-667-022-39/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 US-10-667-022-38/c
                                                                                                  RESULT 299
US-10-667-022-37/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               US-10-667-022-38
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                SEQ ID NO 37
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TYPE: DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     RESULT 301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        dG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Sequence 35, Application US/10667022
Publication No. US20040063657A1
GENERAL INFORMATION:
GENERAL INFORMATION:
APPLICANT: Susan M. Freier
TITLE OF INVENTION:
TITLE OF
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Sequence 36, Application US/10667022

Publication No. US20040063657A1

GENERAL INFORMATION:
GENERAL INFORMATION:
APPLICANT: Suban M. Freier

APPLICANT: Suban M. Probie

TITLE OF INVENTION: ANTISENSE MODULATION OF PHOSPHOINOSITIDE-3-KINASE, REGULATORY SUB-
TITLE OF INVENTION: ANTISENSE MODULATION OF PHOSPHOINOSITIDE-3-KINASE, REGULATORY SUB-
TITLE OF INVENTION: ANTISENSE MODULATION OF PHOSPHOINOSITIDE-3-KINASE, REGULATORY SUB-
TITLE OF INVENTION: ANTISENSE MODULATION OF PHOSPHOINOSITIDE-3-KINASE, REGULATORY SUB-
TITLE OF INVENTION: 181-003-09-18

TOTRENT PILING DATE: 2003-09-18

NUMBER OF SEQ ID NOS: 147

SEQ ID NO 36

LENGTH: 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ö
                                                                                                                                                                                                                                                                                                             ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Gaps
                                                                                                                                                                                                                                                                                                                 Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             0
                                                                                                                                                                                                                                                                                                             .;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Query Match 0.4%; Score 20; DB 1; Length 20; Best Local Similarity 100.0%; Pred. No. 2.6e+02; Matches 20; Conservative 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Length 20;
                                                                                                                                                                                                                                           Length 20;
                                                                                                                                                                                                                                                                                                          0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          0.4%; Score 20; DB 1; L4
100.0%; Pred. No. 2.6e+02;
tive 0; Mismatches 0;
                                                                                                                                                                                                                                       Query Match 0.4%; Score 20; DB 1; L
Best Local Similarity 100.0%; Pred. No. 2.6e+02;
Matches 20; Conservative 0; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ; OTHER INFORMATION: Antisense Oligonucleotide
US-10-667-022-36
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               OTHER INFORMATION: Antisense Oligonucleotide
                                                                                                                                            OTHER INFORMATION: Antisense Oligonucleotide
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1498 CAGCGTGGCAATGCCTTTCC 1517
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1441 CAGATGATTCACCGTGAGCC 1460
                                                                                                                                                                                                                                                                                                                                                                                    1414 GATCACAGTATCAGAGATT 1433
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 20 CAGATGATTCACCGTGAGCC 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                   GATCACAGTATCAGAGATT 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TYPE: DNA
ORGANISM: Artificial Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ORGANISM: Artificial Sequence
                                                                             ORGANISM: Artificial Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 20; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        RESULT 298
US-10-667-022-36/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  US-10-667-022-35
                                                                                                                                                                               US-10-667-022-34
                 LENGTH: 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                   20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TYPE: DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  셤
                                                                                                                                                                                                                                                                                                                                                                                           à
                                                                                                                                                                                                                                                                                                                                                                                                                                                   셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ò
```

gibbs-10-667-022-4.rnpb

```
RESULT 304

US-10-667-022-42/c

Sequence 42, Application US/10667022

Sequence 42, Application US/10667022

Sequence 42, Application No. US20040063657A1

GENERAL INFORMATION:

APPLICANT: Susan M. Freier

APPLICANT: Renneth W. Dobie

TITLE OF INVENTION: ANTISENSE MODULATION OF PHOSPHOINOSITIDE-3-KINASE, REGULATORY SUBI

TITLE OF INVENTION: P150 EXPRESSION

TITLE OF INVENTION: P150 EXPRESSION

TITLE OF INVENTION: P150 EXPRESSION

CURRENT APPLICATION NUMBER: US/10/667,022

CURRENT FILING DATE: 2003-09-18

SEQ ID NO 42

LENGTH: 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  US-10-667-022-43/c
US-10-667-022-43/c
Sequence 43, Application US/10667022
Sequence 43, Application No. US20040063657A1
Sequence 43, Application No. US20040063657A1
GENERAL INFORMATION:
THE OF INVENTION:
TITLE OF INVENTION: PISO EXPRESSION
TITLE OF INVENTION: PISO EXPLICATION NUMBER: US/10/667,022
CURRENT APPLICATION NUMBER: US/10/667,022
CURRENT FILING DATE: 2003-09-18
SEQ ID NO 43
LENGTH: 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ö
          ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ö
       Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Gарв
          ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ô
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Length 20;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Length 20;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Indels
          .
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Query Match 0.4%; Score 20; DB 1; Le
Best Local Similarity 100.0%; Pred. No. 2.6e+02;
Matches 20; Conservative 0; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Ouery Match 0.4%; Score 20; DB 1; Le
Best Local Similarity 100.0%; Pred. No. 2.6e+02;
Matches 20; Conservative 0; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            , OTHER INFORMATION: AntiBenBe Oligonucleotide US-10-667-022-42
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ; OTHER INFORMATION: Antisense Oligonucleotide US-10-667-022-43
       0; Mismatches
                                                       1706 CTGTTATAACATCCTGCCTA 1725
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1978 GCCCAAGATGATGCTACTAT 1997
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 2005 CTAGCCTATGCTGAAACAT 2024
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         US-10-667-022-44/c
; Sequence 44, Application US/10667022
; Publication No. US20040063657A1
; GENERAL INFORMATION:
; APPLICANT: Susan M. Freier
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     20 GCCCAAGATGATGCTACTAT 1
                                                                                  20 CTGTTATAACATCCTGCCTA 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 20 cragccrargcrgaaacar 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TYPE: DNA ORGANISM: Artificial Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ORGANISM: Artificial Sequence
       Matches 20; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TYPE: DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          RESULT 306
                                                         ઠે
                                                                                                    g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            RESULT 302
US-10-667-022-40/C
US-10-667-022-40/C
S-20-667-022-40/C
S-20-667-022-40/C
Publication No. US20040063657A1
GENERAL INFORMATION:
GENERAL INFORMATION:
APPLICANT: Kenneth W. Dobie
TITLE OF INVENTION: PLSO EXPRESSION
CURRENT APPLICATION NUMBER: US/10/667,022
CURRENT APPLICATION NUMBER: US/10/667,022
CURRENT PILING DATE: 2003-09-18
NUMBER OF SEQ ID NOS: 147
SEQ ID NO 40
LENGTH: 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Sequence 41, Application US/10667022
| Publication No. US20040063657A1
| GENERAL INFORMATION:
| APPLICANT: Studen M. Freier
| APPLICANT: Kenneth W. Dobie
| TITLE OF INVENTION: PLSO EXPRESSION |
| TITLE OF INVENTION: PLSO EXPRESSION |
| FILE REFERENCE: RTS-0376 |
| CURRENT APPLICATION UNMER: US/10/667,022 |
| CURRENT FILING DATE: 2003-09-18 |
| NUMBER OF SEQ ID NOS: 147
                                                                                                                                                                                                                                                                                                                      ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ö
                                                                                                                                                                                                                                                                                                                    Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Gaps
                                                                                                                                                                                                                                                                                                                      ;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      0.4%; Score 20; DB 1; Length 20; 100.0%; Pred. No. 2.6e+02;
                                                                                                                                                                                                                                                               Query Match

0.4%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 2.6e+02;
Matches 20; Conservative 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 0.4%; Score 20; DB 1; Length 20; 100.0%; Pred. No. 2.6e+02; tive 0; Mismatches 0; Indels
                                                                                                                                                                  FEATURE:

CHER INFORMATION: Antisense Oligonucleotide
US-10-667-022-39
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ; OTHER INFORMATION: Antisense Oligonucleotide US-10-667-022-41
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              OTHER INFORMATION: Antisense Oligonucleotide
CURRENT APPLICATION NUMBER: US/10/667,022
CURRENT FILING DATE: 2003-09-18
NUMBER OF SEQ ID NOS: 147
SEQ ID NO 39
LENGTH: 20
                                                                                                                                                                                                                                                                                                                                                              1658 AAAAAGCCGAAGGAGAGCCT 1677
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               20 AAAAGCCGAAGGAGAGCCT 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TYPE: DNA
ORGANISM: Artificial Sequence
                                                                                                                     TYPE: DNA
ORGANISM: Artificial Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TYPE: DNA
ORGANISM: Artificial Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    20; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    RESULT 303
US-10-667-022-41/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  US-10-667-022-40
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                SEQ ID NO 41
LENGTH: 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Matches
                                                                                                                                                                                                                                                                                                                                                                                                              g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ઠે
                                                                                                                                                                                                                                                                                                                                                                   ઠે
```

```
Sequence 47, Application US/10667022

Publication No. US20040063657A1

Publication No. US20040063657A1

APPLICANT: Susan M. Freier

APPLICANT: Kenneth W. Dobie

TITLE OF INVENTION: ANYISENSE MODULATION OF PHOSPHOINOSITIDE-3-KINASE, REGULATORY SUBITILE OF INVENTION: P150 EXPRESSION

TITLE OF INVENTION: P150 EXPRESSION

FILLE REFERENCE: RTS-0376

CURRENT APPLICATION NUMBER: US/10/667,022

CURRENT FILING DATE: 2003-09-18

NUMBER OF SEQ ID NOS: 147

SEQ ID NO 47

LENGTH: 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     US-10-667-022-48/c
US-10-667-022-48/c
US-10-667-022-48/c
Sequence 48, Application US/10667022
Publication No. US20040063657A1
GENERAL INFORMATION:
APPLICANT: Stanen M. Freier
APPLICANT: Kenneth W. Dobie
TITLE OF INVENTION: ANTISENSE MODULATION OF PHOSPHOINOSITIDE-3-KINASE, REGULATORY SUBITITE OF INVENTION: PLO EXPRESSION
TITLE OF INVENTION: PLO EXPRESSION
TITLE OF INVENTION: NUMBER: US/10/667,022
CURRENT APPLICATION NUMBER: US/10/667,022
CURRENT FILING DATE: 2003-09-18
NUMBER: OF SEQ ID NOS: 147
SEQ ID NO 48
LENGTH: 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ö
                                                                                                                        ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Gaps
                                                                                                                               Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ö
                                                                                                                               ..
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Length 20;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Query Match

0.4%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 2.6e+02;
Matches 20; Conservative 0; Mismatches 0; Indels
                                                            Length 20;
                                                                                                                           0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Query Match
0.4%; Score 20; DB 1; Le.
Best Local Similarity 100.0%; Pred. No. 2.6e+02;
Matches 20; Conservative 0; Mismatches 0;
                                                        0.4%; Score 20; DB 1; Lt
100.0%; Pred. No. 2.6e+02;
:ive 0; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CTHER INFORMATION: Antisense Oligonucleotide US-10-667-022-48
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ) OTHER INFORMATION: Antisense Oligonucleotide US-10-667-022-47
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               2438 TTAGTGATGCTGAGGAATTT 2457
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 2391 TGGCTGGCAAAGCTCCTCAA 2410
                                                                                                                                                                                                     2131 CCAAATGGAAATTATGACAC 2150
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    20 TTAGTGATGCTGAGGAATTT 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                20 rederededadecreeran 1
                                                                                                                                                                                                                                         20 CCAAATGGAAATTATGACAC 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TYPE: DNA ORGANISM: Artificial Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TYPE: DNA ORGANISM: Artificial Sequence
                                                                                                                                      20; Conservative
                                                                      Query Match
Best Local Similarity
Matches 20; Conserva
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            RESULT 311
US-10-667-022-49/C
                                                                                                                                                                                                                                                                                                                                                                               RESULT 309
US-10-667-022-47/c
       US-10-667-022-46
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       임
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ઠે
                                                                                                                                                                                                                à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Sequence 46, Application US/10667022

Sequence 46, Application US/10667022

Publication No. US20040063657A1

GENERAL INFORMATION:
APPLICANT: Steneth W. Doble
TITLE OF INVENTION: P150 EXPRESSION
TITLE OF INVENTION: P160 EXPRESSION
TITLE OF INVENTION: P170 EXPRESSION
TITLE OF INVENTION
TITLE OF INVENTION: P170 EXPRESSION
TITLE OF INVENTION: P170 EXPRESSION
TITLE OF INVENTION: P170 EXPRESSION
TITLE OF INVENTION
TITLE OF INVENTION: P170 EXPRESSION
TITLE OF INVENTION: P170 EXPRESSION
TITLE OF INVENTION

                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sequence 45, Application US/10667022
Sequence 45, Application US/10667022
Sequence 45, Application US/106367A1
Sequence 45, Application No US20040063657A1
GENERAL INFORMATION:
GENERAL INFORMATION:
APPLICANT: Stean M. Freier
APPLICANT: Stean M. Freier
APPLICANT: Stean M. Freier
APPLICANT: Stean M. Preier
TITLE OF INVENTION: ANTISENSE MODULATION OF PHOSPHOINOSITIDE-3-KINASE, REGULATORY SUBTILE REFERENCE: RFS-0376
CURRENT APPLICATION NUMBER: US/10/667,022
CURRENT FILING DATE: 2003-09-18
NUMBER OF SEQ ID NOS: 147
SEQ ID NO 45
LENGTH: 20
APPLICANT: Kenneth W. Dobie
TITLE OF INVENTION: ANTISENSE MODULATION OF PHOSPHOINOSITIDE-3-KINASE, REGULATORY SUB-
TITLE OF INVENTION: PLSO EXPRESSION
TITLE OF INVENTION: PLSO EXPRESSION
CURRENT APPLICATION NUMBER: US/10/667,022
CURRENT APPLICATION NUMBER: US/10/667,022
KURRENT FILING DATE: 2003-09-18
KUMBER OF SEQ ID NOS: 147
SEQ ID NO 44
LENGTH: 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        o;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ..
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Length 20;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Query Match 0.4%; Score 20; DB 1; Length 20; Best Local Similarity 100.0%; Pred. No. 2.6e+02; Matches 20; Conservative 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Query Match
0.4%; Score 20; DB 1; Le
Best Local Similarity 100.0%; Pred. No. 2.6e+02;
Matches 20; Conservative 0; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  FEATURE:
OTHER INFORMATION: Antisense Oligonucleotide
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            OTHER INFORMATION: Antisense Oligonucleotide
                                                                                                                                                                                                                                                                                                                                                                                                        ; OTHER INFORMATION: Antisense Oligonucleotide
US-10-667-022-44
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 2080 CTTAATATGGAAAATGACCC 2099
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  2041 ACAGCTCTGAGATTCCTGGA 2060
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          20 CTTAATATGGAAAATGACCC 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         20 ACAGCTCTGAGATTCCTGGA 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TYPE: DNA ORGANISM: Artificial Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ORGANISM: Artificial Sequence
                                                                                                                                                                                                                                                                                                                             TYPE: DNA
ORGANISM: Artificial Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           RESULT 308
US-10-667-022-46/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        RESULT 307
US-10-667-022-45/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               US-10-667-022-45
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TYPE: DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         셤
```

```
Sequence 5. Application US/10667022
Publication No. US20040063657A1
GENERAL INFORMATION:
APPLICANT: Suban M. Freier
APPLICANT: Sementh W. Dobie
TITLE OF INVENTION: ANTISENSE MODULATION OF PHOSPHOINOSITIDE-1-KINASE, REGULATORY SUBITILES OF INVENTION: P150 EXPRESSION
FILE REFERENCE: RTS-0376
CURRENT APPLICATION NUMBER: US/10/667,022
CURRENT FILING DATE: 2003-09-18
NUMBER OF SEQ ID NOS: 147
LENGTH: 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Sequence 53, Application US/10667022
Publication No. US20040063657A1
Fublication No. US20040063657A1
GENERAL INFORMATION:
APPLICANT: SUMB M. Freier
APPLICANT: Kenneth W. Dobie
TITLE OF INVENTION: PISO EXPRESSION
FILE REFERENCE: RTS-0376
CURRENT APPLICATION NUMBER: US/10/667,022
CURRENT PILING DATE: 2003-09-18
NUMBER OF SEQ ID NOS: 147
LENGTH: 20
                                                                                                                                                                                                                                                        ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ö
                                                                                                                                                                                                                                                        ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ö
                                                                                                                                                                                           Length 20;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Length 20;
                                                                                                                                                                                                                                                        0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Length 20;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Indele
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 DB 1; Le . 2.6e+02;
                                                                                                                                                                                           DB 1; Le
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          0.4%; Score 20; DB 1; Lv
100.0%; Pred. No. 2.6e+02;
ative 0; Mismatches 0;
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FRATURE:
; OTHER INFORMATION: Antisense Oligonucleotide
US-10-667-022-51
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ; OTHER INFORMATION: AntiBense Oligonucleotide
US-10-667-022-52
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ; OTHER INFORMATION: Antisense Oligonucleotide US-10-667-022-53
                                                                                                                                                                                        Query Match

0.4%; Score 20; DB
Best Local Similarity 100.0%; Pred. No. 2.6
Matches 20; Conservative 0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Query Match

0.4%; Score 20; DB
Best Local Similarity 100.0%; Pred. No. 2.6
Matches 20; Conservative 0; Mismatches
                                                                                                                                                                                                                                                                                                                   2587 GGTGCCGTGGGATTTATCAC 2606
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        2731 GAACCAGTAAGTCGTTCTAT 2750
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           2843 GCCTCCGCCAGAGGATCCT 2862
                                                                                                                                                                                                                                                                                                                                                         20 GGTGCCGTGGGATTTATCAC 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      20 GAACCAGTAAGTCGTTCTAT 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     20 GCCCTCCGCCAGAGGATCCT 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TYPE: DNA
ORGANISM: Artificial Sequence
FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ORGANISM: Artificial Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Query Match
Best Local Similarity 100.
Matches 20; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        US-10-667-022-52/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    US-10-667-022-53/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TYPE: DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         FEATURE:
                                                                                                                                                                                                                                                                                                                      ઠ
                                                                                                                                                                                                                                                                                                                                                                      용
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ઠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     엄
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              RESULT 312
US-10-667-022-50/C

Sequence 50, Application US/10667022
Publication No. USZ0040063657A1

APPLICANT: Susan M. Freier
APPLICANT: Susan M. Freier
TITLE OF INVENTION: ANTISENSE MODULATION OF PHOSPHOINOSITIDE-3-KINASE, REGULATORY SUSATILE OF INVENTION: P150 EXPRESSION
TITLE OF INVENTION: P150 EXPRESSION
TITLE OF INVENTION: P150 EXPRESSION
CURRENT APPLICATION NUMBER: US/10/667,022
CURRENT FILING DATE: 2003-09-18
NUMBER OF SEQ ID NOS: 147
: SEQ ID NO 50
. LENGTH: 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              RESULT 313
US-10-667-022-51/C
US-10-667-022-51/C
Sequence 51, Application US/10667022
Publication No. US20040063657A1
GENERAL INFORMATION:
GENERAL INFORMATION:
APPLICANT: Suban M. Freier
APPLICANT: Kenneth W. Dobie
TITLE OF INVENTION:
APPLICANT: REPERENCE:
APPLICANT: REPLICANT:
APPLICANT:
APPLICA
                                                                                APPLICANT: Squan M. Freier
APPLICANT: Kenneth W. Dobie
TITLE OF INVENTION: ANTISENSE MODULATION OF PHOSPHOINOSITIDE-3-KINASE, REGULATORY SUB
TITLE OF INVENTION: P150 EXPRESSION
FILE REFERENCE: RTS-0376
CURRENT APPLICATION NUMBER: US/10/667,022
CURRENT FILING DATE: 2003-09-18
NUMBER OF SEQ ID NOS: 147
SEQ ID NO 49
LENGTH: 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     0.4%; Score 20; DB 1; Length 20; 100.0%; Pred. No. 2.6e+02; tive 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Query Match 0.4%; Score 20; DB 1; Length 20; Best Local Similarity 100.0%; Pred. No. 2.6e+02; Matches 20; Conservative 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           OTHER INFORMATION: Antisense Oligonucleotide
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      2524 GITTACGAATITGCCAGTGA 2543
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   2555 TCCTGTGTCATCCCAATTTA 2574
Sequence 49, Application US/10667022
Publication No. US20040063657A1
GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    GTTTACGAATTTGCCAGTGA 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             rccrercrercarcrarra 1
                                                                                                                                                                                                                                                                                                                                                                                                TYPE: DNA
ORGANISM: Artificial Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Query Match
Best Local Similarity
Matches 20; Conserva
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           US-10-667-022-49
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          임
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ઠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ઠે
```

```
US-10-667-022-57/c

US-10-667-022-57/c

Sequence 57, Application US/10667022

Sequence 57, Application US/10667022

Sequence 57, Application US/1063-02-1

Sequence 57, Application US/1063-02-1

GENERAL INFORMATION:

APPLICANT: Kenneth W. Doble

TITLE OF INVENTION: P150 EXPRESSION

TITLE OF INVENTION: P150 EXPRESSION

TITLE OF INVENTION: P150 EXPRESSION

CURRENT APPLICATION NUMBER: US/10/667,022

CURRENT FILING DATE: 2003-09-18

SEQ ID NOS: 147

LENGTH: 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 US-10-667-022-58/C

US-10-667-022-58/C

Sequence 58, Application US/10667022

Publication No. US20040063657A1

GENERAL INFORMATION:

APPLICANT: Susan M. Freier

APPLICANT: Kenneth W. Dobie

TITLE OF INVENTION: ANTISENSE MODULATION OF PHOSPHOINOSITIDE-3-KINASE, REGULATORY SUBNITIVE OF INVENTION: P150 EXPRESSION

TITLE OF INVENTION: P150 EXPRESSION

TITLE OF INVENTION: P150 EXPRESSION

CURRENT APPLICATION NUMBER: US/10/667,022

CURRENT PILING DATE: 2003-09-18

SEQ ID NOS: 147

LENGTH: 20

WORDER OF SEQ ID NOS: 147
                                                                                                                                                                                                                                                                                                    ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ô
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ö
                                                                                                                                                                                                                                                                                                    Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  .
0
                                                                                                                                                                                                                                                                                                    ô
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Query Match

0.4%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 2.6e+02;
Matches 20; Conservative 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                   Length 20;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Length 20;
                                                                                                                                                                                                                                                                                                 Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Query Match 0.4%; Score 20; DB 1; Length 20; Best Local Similarity 100.0%; Pred. No. 2.6e+02; Matches 20; Conservative 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                Query Match 0.4%; Score 20; DB 1; Les Best Local Similarity 100.0%; Pred. No. 2.6e+02; Matches 20; Conservative 0; Mismatches 0;
                                                                                                                                                                        ; OTHER INFORMATION: Antisense Oligonucleotide US-10-667-022-56
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ; OTHER INFORMATION: Antisense Oligonucleotide US-10-667-022-57
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ; OTHER INFORMATION: Antisense Oligonucleotide US-10-667-022-58
                                                                                                                                                                                                                                                                                                                                                  3009 TCAGAAAGGTGTAATTGACT 3028
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              3057 AGTIGATCTIGITAAAACCA 3076
                                                                                                                                                                                                                                                                                                                                                                                              20 rcagaaaggrgraarrgacr 1
CURRENT FILING DATE: 2003-09-18
UNDBER OF SEQ ID NOS: 147
SEQ ID NO 56
LENGTH: 20
                                                                                                  TYPE: DNA ORGANISM: Artificial Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TYPE: DNA ORGANISM: Artificial Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ORGANISM: Artificial Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TYPE: DNA
                                                                                                                                                   FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              FEATURE:
                                                                                                                                                                                                                                                                                                                                                  ઠે
                                                                                                                                                                                                                                                                                                                                                                                         g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             g
                                                                                       Sequence 54, Application US/10667022
Publication No. US20040063657A1
GENERAL INFORMATION:
APPLICANT: Susan M. Freier
APPLICANT: Stenneth M. Dobje
TITLE OF INVENTION: ANTISENSE MODULATION OF PHOSPHOINOSITIDE-3-KINASE, REGULATORY SUBTILE OF INVENTION: P150 EXPRESSION
FILE REPRENEUR: RTS-0376
CURRENT APPLICATION UNMBER: US/10/667,022
CURRENT FILING DATE: 2003-09-18
NUMBER OF SEQ ID NOS: 147
LENGTH: 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     RESULT 317
US-10-667-022-55/C
US-10-667-022-55/C
Sequence 55, Application US/10667022
Publication No. US20040063657A1
GENERAL INPORMATION:
APPLICANT: Susan M. Freier
APPLICANT: Kenneth W. Dobie
TITLE OF INVENTION: P150 EXPRESSION
FILE REPRENCE: RTS-0376
CURRENT APPLICATION UNDER: US/10/667,022
CURRENT APPLICATION UNDER: US/10/667,022
CURRENT FILING DATE: 2003-09-18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Sequence 56, Application US/10667022
Sequence 56, Application US/10667022
Publication No. US20040063657A1
GENERAL INFORMATION:
GENERAL INFORMATION:
Susan M. Freier
APPLICANT: Susan M. Freier
APPLICANT: Kenneth W. Dobie
TITLE OF INVENTION: ANTISENSE MODULATION OF PHOSPHOINOSITIDE-3-KINASE, REGULATORY SUBTILE REFERENCE: RTS-0376
CURRENT APPLICATION NUMBER: US/10/667,022
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ó
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Length 20;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  0.4%; Score 20; DB 1; Length 20;
100.0%; Pred. No. 2.6e+02;
Live 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Query Match
0.4%; Score 20; DB 1; Le
Best Local Similarity 100.0%; Pred. No. 2.6e+02;
Matches 20; Conservative 0; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                               FEATURE:
; OTHER INFORMATION: Antisense Oligonucleotide
US-10-667-022-54
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ; FEATURE:
; OTHER INFORMATION: Antisense Oligonucleotide
US-10-667-022-55
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      2860 CCTGCCATAGCACAGCTTCT 2879
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     2913 AGAGGAAGACAAACTICTGG 2932
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    20 ccreccaraccacaccrer 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   20 AGAGGAAGACAAACTTCTGG 1
                                                                                                                                                                                                                                                                                                                                                                                                                TYPE: DNA
ORGANISM: Artificial Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TYPE: DNA
ORGANISM: Artificial Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Query Match 0.4%;
Best Local Similarity 100.0%
Matches 20; Conservative
                                                                   US-10-667-022-54/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      RESULT 318
US-10-667-022-56/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 SEQ ID NO 55
```

ઠ a ઠે

```
TITLE OF INVENTION: ANTISENSE MODULATION OF PHOSPHOINOSITIDE-3-KINAGE, REGULATORY SUBITITE OF INVENTION: P150 EXPRESSION
FILE REPERENCE: RTS-0376
CURRENT APPLICATION NUMBER: US/10/667,022
CURRENT FILING DATE: 2003-09-18
SEQ ID NOS: 147
LENGIH: 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Sequence 62, Application US/10667022

Fublication No. US20040063657A1

GENERAL INFORMATION:
APPLICANT: Susan M. Freier
TITLE OF INVENTION: ANTISENSE MODULATION OF PHOSPHOINOSITIDE-3-KINASE, REGULATORY SUBITITLE OF INVENTION: P150 EXPRESSION
FILE REFERENCE: RTS-0376
CURRENT APPLICATION NUMBER: US/10/667,022
CURRENT FILING DATE: 2003-09-18
NUMBER OF SEQ ID NOS: 147

LENGTH: 20

LENGTH: 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        US-10-667-022-63/C
US-10-667-022-63/C
US-10-667-022-63/C
Sequence 63, Application US/10667022
Sequence 63, Application No. US20040063657A1
GENERAL INFORMATION:
APPLICANT: Susan M. Freier
APPLICANT: Kenneth W. Dobie
TITLE OF INVENTION: P150 EXPRESSION
TITLE OF INVENTION: P150 EXPRESSION
TITLE OF INVENTION: P150 EXPRESSION
CURRENT APPLICATION NUMBER: US/10/667,022
CURRENT FILING DATE: 2003-09-18
SEQ ID NO 63: 147
LENGTH: 20
                                                                                                                                                                                                                                                                                                                                                                             ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Gaps
                                                                                                                                                                                                                                                                                                                                                                               ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Query Match 0.4%; Score 20; DB 1; Length 20; Best Local Similarity 100.0%; Pred. No. 2.6e+02; Matches 20; Conservative 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                Length 20;
                                                                                                                                                                                                                                                                                                                           Query Match 0.4%; Score 20; DB 1; Le Best Local Similarity 100.0%; Pred. No. 2.6e+02; Matches 20; Conservative 0; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               FEATURE:
, OTHER INFORMATION: Antisense Oligonucleotide
US-10-667-022-63
                                                                                                                                                                                                                                                        , OTHER INFORMATION: Antigense Oligonucleotide US-10-667-022-61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ) OTHER INFORMATION: Antisense Oligonucleotide US-10-667-022-62
                                                                                                                                                                                                                                                                                                                                                                                                                        3388 AAAACTGAACTTCAGCAACT 3407
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     3431 GCAATGCTGAGAGAATAGCT 3450
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   20 AAAACTGAACTTCAGCAACT 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                20 GCAATGCTGAGAGAATAGCT 1
                                                                                                                                                                                       TYPE: DNA
ORGANISM: Artificial Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TYPE: DNA ORGANISM: Artificial Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TYPE: DNA ORGANISM: Artificial Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              JS-10-667-022-62/c
                                                                                                                                                                                                                                       FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                        ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                셤
                                                                                                                                                                            Sequence 59, Application US/10667022
| Publication No. US20040063657A1
| GENERAL INFORMATION: APPLICANT: Susan M. Freier APPLICANT: Kenneth W. Dobie TITLE OF INVENTION: ANTISENSE MODULATION OF PHOSPHOINOSITIDE-3-KINASE, REGULATORY SUBTILE REFRENCE: RTS-0376
| FILE REFRENCE: RTS-0376
| CURRENT APPLICATION NUMBER: US/10/667,022
| CURRENT APPLICATION NUMBER: 2003-09-18
| NUMBER OF SEQ ID NOS: 147
| SEQ ID NOS: 147
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Sequence 60. Application US/10667022

Sequence 60. Application No. US20040063657A1

GENERAL INFORMATION:
APPLICANT: Susan M. Freier
APPLICANT: Kenneth W. Dobie
TITLE OF INVENTION: PLSO EXPRESSION
FILE REFERENCE: RTS-0376
CURRENT APPLICATION UNDER: US/10/667,022
CURRENT FILING DATE: 2003-09-18
NUMBER OF SEQ ID NOS: 147
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            0.4%; Score 20; DB 1; Length 20;
100.0%; Pred. No. 2.6e+02;
iive 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Length 20;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Query Match
0.4%; Score 20; DB 1; Lv
Best Local Similarity 100.0%; Pred. No. 2.6e+02;
Matches 20; Conservative 0; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ) OTHER INFORMATION: Antisense Oligonucleotide US-10-667-022-59
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ; OTHER INFORMATION: Antisense Oligonucleotide US-10-667-022-60
                       3250 TCTGCTGCCATTTGTGTCCC 3269
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       3318 AAAACCAGTAATACCGGTTT 3337
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      3341 GTAGTACAATCTTACCATCC 3360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     US-10-667-022-61/c
; Sequence 61, Application US/10667022
; Publication No. US20040063657A1
; GENERAL INFORMATION:
; APPLICANT: Susan M. Freier
; APPLICANT: Kenneth W. Dobie
                                                    20 AAAACCAGTAATACCGGTTT 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              20 GTAGTACATCTTACCATCC 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TYPE: DNA ORGANISM: Artificial Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ORGANISM: Artificial Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Best Local Similarity 100.
Matches 20; Conservative
                                                                                                                                   RESULT 321
US-10-667-022-59/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                RESULT 322
US-10-667-022-60/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          SEQ ID NO 60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CYPE: DNA
                       ઠે
                                                              용
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ઠે
```

```
Publication No. US20040063657A1
GENERAL INFORMATION:
APPLICANT: Susan M. Freier
APPLICANT: Susan M. Dobie
TITLE OF INVENTION: P150 EXPRESSION
FILE OF INVENTION: P150 EXPRESSION
FILE REFERENCE: RTS-0376
CURRENT APPLICATION NUMBER: US/10/667,022
CURRENT FILING DATE: 2003-09-18
NUMBER OF SEQ ID NOS: 147
SEQ ID NO 66
LENGTH: 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Sequence 67, Application US/10667022
Figure 67, Application US/10667022
Publication No. US20040063657A1
Fublication No. US20040063657A1
GENERAL INFORMATION:
APPLICANT: Sugan M. Freier
TITLE OF INVENTION: ANTISENSE MODULATION OF PHOSPHOINOSITIDE-3-KINASE, REGULATORY SUBITITLE OF INVENTION: P150 EXPRESSION
FILE REFERENCE: RTS-0376
CURRENT APPLICATION NUMBER: US/10/667,022
CURRENT FILING DATE: 2003-09-18
NUMBER OF SEQ ID NOS: 147
FIRM TO 67
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             RESULT 330

US-10-667-022-68/c

US-10-667-022-68/c

Sequence 68, Application US/10667022

Publication No. US20040063657A1

GENERAL INFORMATION:

APPLICANT: Suban M. Preier

APPLICANT: Neaneth W. Dobie

TITLE OF INVENTION: ANTISENSE MODULATION OF PHOSPHOINOSITIDE-3-KINASE, REGULATORY SUITIES OF INVENTION: P150 EXPRESSION

TITLE OF INVENTION: NUMBER: US/10/667,022

CURRENT APPLICATION NUMBER: US/10/667,022

CURRENT FILING DATE: 2003-03-18

NUMBER OF SEQ ID NOS: 147

SEQ ID NO 68

LENGTH: 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Length 20;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Length 20;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       0.4%; Score 20; DB 1; Le
100.0%; Pred. No. 2.6e+02;
tive 0; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Query Match 0.4%; Score 20; DB 1; Le
Best Local Similarity 100.0%; Pred. No. 2.6e+02;
Matches 20; Conservative 0; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                      TYPE: DNA
ORGANISM: Artificial Sequence
FEATURE:
OTHER INFORMATION: Antisense Oligonucleotide
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             OTHER INFORMATION: Antisense Oligonucleotide
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       3583 TCACTTTTGCAACATGTTC 3602
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  3555 GAATCGAATTAGAGTCTCTG 3574
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              20 TCACTTTTGCAACATGTTC 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  20 GAATCGAATTAGAGTCTCTG 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TYPE: DNA
ORGANISM: Artificial Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Best Local Similarity 100.
Matches 20; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    US-10-667-022-67
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               US-10-667-022-66
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             쉱
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             RESULT 327
US-10-667-022-65/c
US-10-667-022-65/c

Sequence 65, Application US/10667022

Publication No. US20040063657A1

GENERAL INFORMATION:
APPLICANT: Suban M. Freier
APPLICANT: Kenneth W. Dobie
TITLE OF INVENTION: ANTISENSE MODULATION OF PHOSPHOINOSITIDE-3-KINASE, REGULATORY SUBTITE OF INVENTION: P150 EXPRESSION
TITLE OF INVENTION: ANTISENSE MODULATION OF PHOSPHOINOSITIDE-3-KINASE, REGULATORY SUBTITE REFERENCE: R15-0376
CURRENT APPLICATION NUMBER: US/10/667,022
CURRENT FILING DATE: 2003-09-18

NUMBER OF SEQ ID NOS: 147

SEQ ID NO 65
LENGTH: 20
                                                                                                                                                                                                                                                                                                                                                                                                            Sequence 64, Application US/10667022
Publication No. US20040063657A1
GENERAL INFORMATION:
GENERAL INFORMATION:
APPLICANT: Reanen W. Preier
APPLICANT: Kenneth W. Dobie
TITLE OF INVENTION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ö
                                                                                                                          ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Gaps
                                                                                                                          Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ó
                                                                                                                              ..
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Query Match

0.4%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 2.6e+02;
Matches 20; Conservative 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Length 20;
                                                      Length 20;
                                                                                                                          0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Query Match 0.4%; Score 20; DB 1; Le Best Local Similarity 100.0%; Pred. No. 2.6e+02; Matches 20; Conservative 0; Mismatches 0;
                                                  DB 1; Le
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ; OTHER INFORMATION: Antisense Oligonucleotide
US-10-667-022-65
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ) OTHER INFORMATION: Antisense Oligonucleotide US-10-667-022-64
                                                         Query Match 0.4%; Score 20; DB Best Local Similarity 100.0%; Pred. No. 2.6 Matches 20; Conservative 0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                3523 GITGCCCATCTTCATGAGCA 3542
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       3504 GCGTCCTAAAGGGCTGTTAG 3523
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             RESULT 328
US-10-667-022-66/c
; Sequence 66, Application US/10667022
                                                                                                                                                                                              3455 AGATGATGGAAAATGCTGAA 3474
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             20 GCGTCCTAAAGGGCTGTTAG 1
                                                                                                                                                                                                                                             20 AGATGATGGAAAATGCTGAA 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ORGANISM: Artificial Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TYPE: DNA ORGANISM: Artificial Sequence
                                                                                                                                                                                                                                                                                                                                                                               RESULT 326
US-10-667-022-64/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               셤
                                                                                                                                                                                                         à
```

```
Sequence 71, Application US/10667022
Publication No. US20040063657A1
Publication No. US20040063657A1
Publication No. US20040063657A1
REBERAL INFORMATION:
APPLICANT: Kenneth W. Dobie
TITLE OF INVENTION: ANTISENSE MODULATION OF PHOSPHOINOSITIDE-3-KINASE, REGULATORY SUBITITLE OF INVENTION: P150 EXPRESSION
TITLE OF INVENTION: P150 EXPRESSION
CURRENT APPLICATION UNDER: US/10/667,022
CURRENT FILING DATE: 2003-09-18
SUNDBER OF SEQ ID NOS: 147
SEQ ID NO 71
LENGTH: 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Publication No. US20040063657A1

GENERAL INFORMATION:

APPLICANT: Suban M. Freier

APPLICANT: Suban M. Dobie

TITLE OF INVENTION: ANTISENSE MODULATION OF PHOSPHOINOSITIDE-1-KINASE, REGULATORY SUBITITLE OF INVENTION: P150 EXPRESSION

FILE REFERENCE: R15.0376

CURRENT APPLICATION NUMBER: US/10/667,022

CURRENT APPLICATION NUMBER: US/10/667,022

NUMBER OF SEQ ID NOS: 147

SEQ ID NO 7:

LENGTH: 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               APPLICANT: Kenneth W. Dobie
TITLE OF INVENTION: ANTISENSE MODULATION OF PHOSPHOINOSITIDE-3-KINASE, REGULATORY SUBI
TITLE OF INVENTION: P150 EXPRESSION
FILE REFERENCE: RTS-0376
CURRENT APPLICATION NUMBER: US/10/667,022
CURRENT FILING DATE: 2003-09-18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ô
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Gape
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Length 20;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Length 20;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     0: Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   DB 1; Le
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 DB 1; Le 2.6e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                              ; OTHER INFORMATION: Antisense Oligonucleotide US-10-667-022-71
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           OTHER INFORMATION: Antisense Oligonucleotide
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Query Match 0.4%; Score 20; DB Best Local Similarity 100.0%; Pred. No. 2.6 Matches 20; Conservative 0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Query Match 0.4%; Score 20; DB Best Local Similarity 100.0%; Pred. No. 2.6 Matches 20; Conservative 0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    3927 TCTGGTTGGCTGGGACCTTA 3946
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                3967 ACTITAAAGCATGATTTAAA 3986
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Sequence 73, Application US/10667022
Publication No. US20040063657A1
GENERAL INFORMATION:
APPLICANT: Susan M. Freier
APPLICANT: Kenneth W. Dobie
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 20 rcreerreecreecerna 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             20 ACTTTAAAGCATGATTTAAA 1
                                                                                                                                                                                                                                                                                                                                                                                         TYPE: DNA ORGANISM: Artificial Sequence FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TYPE: DNA
ORGANISM: Artificial Sequence
                           RESULT 333
US-10-667-022-71/C
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   US-10-667-022-72/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      RESULT 335
US-10-667-022-73/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    US-10-667-022-72
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ઠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                   APPLICANT: Susan M. Freier
APPLICANT: Kenneth W. Dobie
TITLE OF INVENTION: ANTISENSE MODULATION OF PHOSPHOINOSITIDE-3-KINASE, REGULATORY SUSTITLE OF INVENTION: P150 EXPRESSION
FILE REPERENCE: RTS-0376
CURRENT APPLICATION NUMBER: US/10/667,022
CURRENT PILING DATE: 2003-09-18
NUMBER OF SEQ ID NOS: 147
SEQ ID NO 69
LENGTH: 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Sequence 70, Application US/10667022
| Publication No. US20040063657A1
| GENERAL INFORMATION:
| APPLICANT: Susan Freier
| APPLICANT: Kenneth W. Dobie
| TITLE OF INVENTION: ANTISENSE MODULATION OF PHOSPHOINOSITIDE-3-KINASE, REGULATORY SUE
| TITLE OF INVENTION: ANTISENSE MODULATION OF PHOSPHOINOSITIDE-3-KINASE, REGULATORY SUE
| FILE REFERENCE: RTG-0376
| CURRENT APPLICATION NUMBER: US/10/667,022
| CURRENT APPLICATION NUMBER: US/10/667,022
| CURRENT PILING DATE: 2003-09-18
| NUMBER OF SEQ ID NOS: 147
| SEQ ID NO 70
| LENGTH: 20
                                                                                                                                                                          ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ö
                                                                                                                                                                          Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Gaps
                                                                                                                                                                          ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ö
                                                                                                                cch 0.4%; Score 20; DB 1; Length 20; al Similarity 100.0%; Pred. No. 2.6e+02; 20; Conservative 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    0.4%; Score 20; DB 1; Length 20; 100.0%; Pred. No. 2.6e+02; Live 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Query Match 0.4%; Score 20; DB 1; Length 20; Best Local Similarity 100.0%; Pred. No. 2.6e+02; Matches 20; Conservative 0; Mismatches 0; Indels
                                               ; OTHER INFORMATION: Antisense Oligonucleotide US-10-667-022-68
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ) OTHER INFORMATION: Antisense Oligonucleotide US-10-667-022-69
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ; OTHER INFORMATION: AntiBense Oligonucleotide US-10-667-022-70
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   3781 GAGGCTTCTAAGCTGCCCAA 3800
                                                                                                                                                                                                                    3762 TGTCCAGCTTCTTGGAATTG 3781
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               3899 TTCTTGCCTATGCCACTGTG 3918
                                                                                                                                                                                                                                                                                                                                                                                    ; Sequence 69, Application US/10657022; Publication No. US20040063657A1; GENERAL INFORMATION:
                                                                                                                                                                                                                                                20 TGTCCAGCTTCTTGGAATTG 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            20 rrcrrsccrarsccacrers 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                20 GAGGCTTCTAAGCTGCCCAA 1
ORGANISM: Artificial Sequence FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TYPE: DNA ORGANISM: Artificial Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ORGANISM: Artificial Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Query Match 0.4
Best Local Similarity 100.
Matches 20; Conservative
                                                                                                                                         Best Local Similarity
                                                                                                                                                                                                                                                                                                                                     RESULT 331
US-10-667-022-69/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   RESULT 332
US-10-667-022-70/c
                                                                                                                        Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      FEATURE:
                                                                                                                                                                     Matches
                                                                                                                                                                                                                                                               a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         셤
                                                                                                                                                                                                                    ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ઠે
```

```
Sequence 76, Application US/10667022
| Sequence 76, Application No. US20040063657A1
| Publication No. US20040063657A1
| GENERAL INFORMATION:
| APPLICANT: Susan M. Freier
| APPLICANT: Kenneth W. Dobie | TITLE OF INVENTION: APPLICANTON: APPLICANTON: APPLICANTON: APPLICANTON: PISO EXPRESSION | TITLE OF INVENTION: PISO EXPRESSION | TITLE OF INVENTION: PISO EXPRESSION | TITLE OF INVENTION: PISO EXPRESSION | CURRENT APPLICATION NUMBER: US/10/667,022 | CURRENT FILING DATE: 2003-09-18 | SEQ ID NO 76 | SEQ ID NO 76 | ELENGTH: 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              US-10-677-022-77/C
Squence 77, Application US/10667022
Squence 77, Application US/10667022
Squence 77, Application No. US20040063657A1
GENERAL INFORMATION:
Squence 17, Application No. US20040063657A1
GENERAL INFORMATION:
Target APPLICANT: Renneth W. Dobie
TITLE OF INVENTION: PLSO EXPRESSION
TITLE OF INVENTION: PLSO EXPRESSION
TITLE OF INVENTION: PLSO EXPRESSION
CURRENT APPLICATION NUMBER: US/10/667,022
CURRENT FILING DATE: 2003-09-18
NUMBER OF SEQ ID NOS: 147
LEMPART OF TARGET OF T
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ; Section 15. Application US/10667022; Holication No. US20040063657A1; Sublication No. US20040063657A1; GENERAL INFORMATION: APPLICANT: Suban M. Freier; APPLICANT: Kenneth W. Dobie; TITLE OF INVENTION: ANTISENSE MODULATION OF PHOSPHOINOSITIDE-3-KINASE, REGULATORY SU
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        .;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Query Match

0.4%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 2.6e+02;
Matches 20; Conservative 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Length 20;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Query Match
0.4%; Score 20; DB 1; Lé
Best Local Similarity 100.0%; Pred. No. 2.6e+02;
Matches 20; Conservative 0; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CTHER INFORMATION: Antisense Oligonucleotide US-10-667-022-77
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     FEATURE:
, OTHER INFORMATION: Antisense Oligonucleotide
US-10-667-022-76
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            4258 CCACTTTCTGAATTACAGCC 4277
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        4212 GGAGACTGGTGACAGAAGAT 4231
4166 TGATTGCAGCTGTTCAGGGC 4185
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         20 GGAGACTGGTGACAGAAGAT 1
                                             20 TGATTGCAGCTGTTCAGGGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TYPE: DNA ORGANISM: Artificial Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TYPE: DNA
ORGANISM: Artificial Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       RESULT 340
US-10-667-022-78/c
                                                                                                                                                                                          RESULT 338
US-10-667-022-76/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       LENGTH:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            엄
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        엄
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       à
           à
                                                                            g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          US-10-667-022-75/c

Sequence 75, Application US/10667022

Sequence 75, Application Wolfof022

Sequence 75, Application No US20040063657A1

Sequence 75, Application No US20040063657A1

GENERAL INFORMATION: Freier

APPLICANT: Kenneth W. Dobie

TITLE OF INVENTION: P150 EXPRESSION

TITLE OF INVENTION: P150 EXPRESSION

TITLE OF INVENTION: P150 EXPRESSION

TITLE OF INVENTION NUMBER: US/10/667,022

CURRENT FILING DATE: 2003-09-18

NUMBER OF SEQ ID NOS: 147

LENGTH: 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Sequence 74, Application US/10667022

Publication No. US20040063657A1

GENERAL INFORMATION:
GENERAL INFORMATION:
APPLICANT: Keanerh W. Dobie
TITLE OF INVENTION: ANTISENSE MODULATION OF PHOSPHOINOSITIDE-3-KINASE, REQULATORY SUBTITLE OF INVENTION: ANTISENSE MODULATION OF PHOSPHOINOSITIDE-3-KINASE, REQULATORY SUBTITLE OF INVENTION: ANTISENSE MODULATION OF PHOSPHOINOSITIDE-3-KINASE, REQULATORY SUBTITLE OF INVENTION: ANTISENSE NOT SERVING TAPLICATION NUMBER: US/10/667,022
CURRENT APPLICATION NUMBER: US/10/667,022
CURRENT APPLICATION NUMBER: US/10/667,022

CURRENT APPLICATION NUMBER: 2003-09-18

NUMBER OF SEQ ID NOS: 147

LENGTH: 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ö
                                                                                                                                                                                                                                                                                                                                                                                                                       ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                       Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ;
0
                                                                                                                                                                                                                                                                                                                                                                                                                       ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Query Match

0.4%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 2.6e+02;
Matches 20; Conservative 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Query Match 0.4%; Score 20; DB 1; Length 20; Best Local Similarity 100.0%; Pred. No. 2.6e+02; Matches 20; Conservative 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                           Query Match

0.4%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 2.6e+02;
Matches 20; Conservative 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ; OTHER INFORMATION: Antisense Oligonucleotide US-10-667-022-75
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ; OTHER INFORMATION: Antisense Oligonucleotide US-10-667-022-74
                                                                                                                                                                                                          , OTHER INFORMATION: Antisense Oligonucleotide US-10-667-022-73
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            4050 CAGTGGTACCATGGCTTGTT 4069
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       3991 GGCCTCATCACTTCCTTTGC 4010
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         20 cagregraccarectrorr 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        20 edecricarcacrircerried 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TYPE: DNA ORGANISM: Artificial Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TYPE: DNA ORGANISM: Artificial Sequence
                                                                                                                                             TYPE: DNA
ORGANISM: Artificial Sequence
                          NUMBER OF SEQ ID NOS: 147
SEQ ID NO 73
LENGTH: 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              RESULT 336
US-10-667-022-74/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        셤
```

```
APPLICANT: Susan M. Freier
APPLICANT: Susan M. Freier
APPLICANT: Susan M. Probie
TITLE OF INVENTION: ANTISENSE MODULATION OF PHOSPHOINOSITIDE-3-KINASE, REGULATORY SUBITILE OF INVENTION: P150 EXPRESSION
TITLE OF INVENTION: P150 EXPRESSION
TITLE OF INVENTION: P150 EXPRESSION
CURRENT APPLICATION NUMBER: US/10/667,022
CURRENT FILING DATE: 2003-09-18
SEQ ID NOS: 147
LENGTH: 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Sequence 82. Application US/10667022

Publication No. US20040063657A1

GENERAL INFORMATION:

APPLICANT: Susan M. Freier

APPLICANT: Kenneth W. Dobie

TITLE OF INVENTION: ANTISENSE MODULATION OF PHOSPHOINOSITIDE-3-KINASE, REGULATORY SUBITITLE OF INVENTION: P150 EXPRESSION

FILE REFERENCE: RTS-0376

CURRENT APPLICATION NUMBER: US/10/667,022

CURRENT FILING DATE: 2003-09-18

NUMBER OF SEQ ID NOS: 147

LENGTH: 20
                                                                                   ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ö
                                                                                       Gape
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Gaps
                                                                                       ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ..
0
                  Length 20;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Length 20;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Length 20;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Query Match
0.4%; Score 20; DB 1; Le
Best Local Similarity 100.0%; Pred. No. 2.6e+02;
Matches 20; Conservative 0; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Query Match
0.4%; Score 20; DB 1; Le
Best Local Similarity 100.0%; Pred. No. 2.6e+02;
Matches 20; Conservative 0; Mismatches 0;
          0.4%; Score 20; DB 1; Le ilarity 100.0%; Pred. No. 2.6e+02; Conservative 0; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       , OTHER INFORMATION: Antisense Oligonucleotide
US-10-667-022-81
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ; OTHER INFORMATION: Antisense Oligonucleotide US-10-667-022-82
                                                                                                                                                     4355 TGAAAATAAGGTTTTGGGAC 4374
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 4397 ATGTTGCAGGAAGTACT 4416
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 4424 CATCTGTGTCCTACTACAGG 4443
                                                                                                                                                                                                                                                                                                                                                          US-10-667-022-81/c
Sequence 81, Application US/10667022
Publication No. US20040063657A1
GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Sequence 83, Application US/10667022; Publication No. US20040063657A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      20 Argrigirecaccacaacracr 1
                                                                                                                                                                                                                          20 rdaaaaraaggrirrgggac 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ORGANISM: Artificial Sequence FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TYPE: DNA ORGANISM: Artificial Sequence
          Query Match
Best Local Similarity
Matches 20; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             US-10-667-022-83/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 US-10-667-022-82/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TYPE: DNA
                                                                                                                                                         8
                                                                                                                                                                                                                      а
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      APPLICANT: Susan M. Freier
APPLICANT: Kenneth W. Dobie
TITLE OF INVENTION: ANTISENSE MODULATION OF PHOSPHOINOSITIDE-3-KINASE, REGULATORY SUBTILE OF INVENTION: P150 EXPRESSION
FILE REFERENCE: RTS-0376
CURRENT APPLICATION NUMBER: US/10/667,022
CURRENT APPLICATION NUMBER: 2003-09-18
NUMBER OF SEQ ID NOS: 147
SEQ ID NO 79
LENGTH: 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        WS-011-667-022-80/c

Sequence 80, Application US/10667022

GENERAL INFORMATION: Prejer

APPLICANT: Kenneth W. Doble

TITLE OF INVENTION: P150 EXPRESSION

T
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                Query Match 0.4%; Score 20; DB 1; Length 20; Best Local Similarity 100.0%; Pred. No. 2.6e+02; Matches 20; Conservative 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Length 20;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Query Match 0.4%; Score 20; DB 1; L
Best Local Similarity 100.0%; Pred. No. 2.6e+02;
Matches 20; Conservative 0; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                      ) OTHER INFORMATION: Antisense Oligonucleotide US-10-667-022-78
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ; OTHER INFORMATION: Antisense Oligonucleotide
US-10-667-022-79
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          , OTHER INFORMATION: Antisense Oligonucleotide US-10-667-022-80
TITLE OF INVENTION: P150 EXPRESSION FILE REPERENCE: FTF-0376 CURRENT APPLICATION NUMBER: US/10/667,022 CURRENT FILING DATE: 2003-09-18 NUMBER OF SEQ ID NOS: 147 SEQ ID NO 78 LENGTH: 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          4292 TCCATGGTATCTACTGTAGT 4311
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          4309 AGTCCTGCAGATGGAAATCC 4328
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   US-10-667-022-79/c
; Sequence 79, Application US/10667022
; Publication No. US20040063657A1
; GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            20 rccarggrarcracrgragr 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            20 AGTCCTGCAGATGGAAATCC 1
                                                                                                                                                                                                                                                TYPE: DNA
ORGANISM: Artificial Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TYPE: DNA
ORGANISM: Artificial Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TYPE: DNA ORGANISM: Artificial Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         FEATURE:
                                                                                                                                                                                                                                                                                                                             FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 g
```

```
GENERAL INFORMATION:
GENERAL INFORMATION:
GENERAL INFORMATION:
GENERAL INFORMATION:
GENERAL INFORMATION:
GENERAL INFORMATION:
APPLICANT: SUSAN M. Freier
APPLICANT: SUSAN M. PLODIE
TITLE OF INVENTION: PLSO EXPRESSION
TITLE OF INVENTION: PLSO EXPLICATION NUMBER: US/10/667,022
CURRENT APPLICATION NUMBER: US/10/667,022
CURRENT FILING DATE: 2003-09-18
SEQ ID NO 86
LENOTH: 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Sequence 87, Application US/10667022
; Sequence 87, Application WS/10667022
; Sequence 87, Application No. Sequence 87, Application No. Sequence 87, Application No. Sequence 87, Application No. Sequence 87, Applicant Sequence 87, Application NUMBER: US/10/667,022
; CURRENT Application NUMBER: US/10/667,022
; CURRENT FILING DATE: 2003-09-18
; NUMBER OF SEQ ID NOS: 147
; SEQ ID NO 87, Application US/10/67,022
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ö
                                                                                                 ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Gaps
                                                                                                     Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ;
0
                                                                                                     ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Query Match
0.4%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 2.6e+02;
Matches 20; Conservative 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Length 20;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Indels
                                                                 Length 20;
                                                                                                   0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  0.4%; Score 20; DB 1; L6
100.0%; Pred. No. 2.6e+02;
tive 0; Mismatches 0;
                                                               Query Match 0.4%; Score 20; DB 1; L. Best Local Similarity 100.0%; Pred. No. 2.6e+02; Matches 20; Conservative 0; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         FRATURE:
CTHER INFORMATION: Antisense Oligonucleotide
US-10-667-022-87
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ; OTHER INFORMATION: Antisense Oligonucleotide US-10-667-022-86
   ; OTHER INFORMATION: Antisense Oligonucleotide US-10-667-022-85
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      4792 CAAAATGGTTAAGATGTACT 4811
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 4776 CTGACTAAATGACACCCAAA 4795
                                                                                                                                            4761 CTGTTTCATGACTGACTGAC 4780
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          20 CAAAATGGTTAAGATGTACT 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           20 CTGACTAAATGACACCCAAA 1
                                                                                                                                                                    20 CTGTTTCATGACTGACTGAC 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TYPE: DNA
ORGANISM: Artificial Sequence
FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ORGANISM: Artificial Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Query Match 0.4%
Best Local Similarity 100.0
Matches 20; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  RESULT 349
US-10-667-022-87/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TYPE: DNA
FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ઠે
                                                                                                                                                                                    g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          APPLICANT: Susan M. Freier
APPLICANT: Susan M. Freier
APPLICANT: Kenneth W. Dobie
TITLE OF INVENTION: ANTISENSE MODULATION OF PHOSPHOINOSITIDE-3-KINASE, REGULATORY SUBTITLE OF INVENTION: P150 EXPRESSION
FILE REPERRACE: RTS-0376
CURRENT APPLICATION NUMBER: US/10/667,022
CURRENT PILING DATE: 2003-09-18
NUMBER OF SEQ ID NOS: 147
SEQ ID NOS: 147
SEQ ID NOS: 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ö
                                                                                                                                                                                                                                                                                                                                                                ő
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Gaps
                                                                                                                                                                                                                                                                                                                                                                  Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ;
0
                                                                                                                                                                                                                                                                                                                                                                  ;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Query Match 0.4%; Score 20; DB 1; Length 20; Best Local Similarity 100.0%; Pred. No. 2.6e+02; Matches 20; Conservative 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                         Query Match

0.4%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 2.6e+02;
Matches 20; Conservative 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    OTHER INFORMATION: Antisense Oligonucleotide US-10-667-022-84
                                                                                                                                                                                                                                                             ; OTHER INFORMATION: Antisense Oligonucleotide
US-10-667-022-83
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             4633 GTGTGGAAATAAAACCTACT 4652
                                                                                                                                                                                                                                                                                                                                                                                                        4461 TGAAGTTGTCCAGGAAATTC 4480
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  20 GTGTGGAAATAAAACCTACT 1
                                                                                                                                                                                                                                                                                                                                                                                                                                              20 readstrictecascaarte 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TYPE: DNA ORGANISM: Artificial Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TYPE: DNA ORGANISM: Artificial Sequence
                                                                                                                                                                                                                      TYPE: DNA ORGANISM: Artificial Sequence
           GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                FEATURE:
                                                                                                                                                                                                                                                           FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                ò
```

gibbs-10-667-022-4.rnpb

```
Sequence 91, Application US/10667022

Publication No. US20040063657A1

GENERAL INFORMATION:
GENERAL INFORMATION:
GENERAL INFORMATION:
TITLE OF INVENTION: ANTISENSE MODULATION OF PHOSPHOINOSITIDE-3-KINASE, REGULATORY SUBITILE REFERENCE: RTS-0376

TITLE OF INVENTION: P150 EXPRESSION
TITLE OF INVENTION: P150 EXPRESSION
CURRENT APPLICATION NUMBER: US/10/667,022
CURRENT FILING DATE: 2003-09-18

NUMBER OF SEQ ID NOS: 147

LENGTH: 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Sequence 92, Application US/10667022

Publication No. US20040063657A1

GENERAL INFORMATION:
APPLICANT: Susan M. Freier
TITLE OF INVENTION: ANTISENSE MODULATION OF PHOSPHOINOSITIDE-3-KINASE, REGULATORY SUBITITLE OF INVENTION: P150 EXPRESSION
TITLE OF INVENTION: P150 EXPRESSION
FILE REFERENCE: RTS-0376
CURRENT APPLICATION NUMBER: US/10/667,022
CURRENT FILING DATE: 2003-09-18
NUMBER OF SEQ ID NOS: 147
LENGTH: 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ö
                                                                                                                                                                              ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Gaps
                                                                                                                                                                                ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ö
                                                                                                                                  DB 1; Length 20; 2.6e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Length 20;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Length 20;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             0.4%; Score 20; DB 1; Le. ilarity 100.0%; Pred. No. 2.6e+02; Conservative 0; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    0.4%; Score 20; DB 1; L
100.0%; Pred. No. 2.6e+02;
                                                                                                                                  Query Match

0.4%; Score 20; DB
Best Local Similarity 100.0%; Pred. No. 2.6
Matches 20; Conservative 0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    92 CGGTCTGCACTTCTCTCCCG 111
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 377 AGCCCATCTCCTGTCTATGA 396
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        486 CCTCTGAACGATTTTGACAC 505
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1 ccrcrcaaccarrrraacac 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Query Match
Best Local Similarity 100.
Matches 20; Conservative
LENGTH: 20
TYPE: DNA
ORGANISM: H. sapiens
FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ; TYPE: DNA; ORGANISM: H. sapiens; FEATURE: US-10-667-022-91
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TYPE: DNA ORGANISM: H. sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Query Match
Best Local Similarity
Matches 20; Conserv
                                                                                                                                                                                                                                                                                                                                     RESULT 353
US-10-667-022-91
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    US-10-667-022-92
                                                                                        US-10-667-022-90
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ; FEATURE:
US-10-667-022-92
                                                                                                                                                                                                                             ઠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ð
                                  Sequence 88, Application US/10667022
| Publication No. US20040063657A1
| Publication No. US20040063657A1
| Publication No. US20040063657A1
| APPLICANT: Susan M. Freier
| APPLICANT: Kenneth W. Dobie
| TITLE OF INVENTION: PISO EXPRESSION | TITLE OF INVENTION: PISO EXPRESSION | FILE REFERENCE: RTG-0376 | CURRENT APPLICATION NUMBER: US/10/667,022 | CURRENT PILING DATE: 2003-09-18 | NUMBER OF SEQ ID NOS: 147 | SEQ ID NOS: 147 | SEQ ID NOS: 147 | LENGTH: 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  US-10-667-022-90
Sequence 90, Application US/10667022
Sequence 90, Application US/10667022
Sequence 90, Splication US/10667022
Sequence 90, Application US/10667022
Sequence 90, Application US/10667022
GENERAL INFORMATION:
APPLICANT: Scan M. Freier
APPLICANT: Kenneth W. Dobie
TITLE OF INVENTION: P150 EXPRESSION
FILE REFERENCE: RTS-0376
CURRENT APPLICATION NUMBER: US/10/667,022
CURRENT FILING DATE: 2003-09-18
SEQ ID NO 90
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            US-10-667-022-89
Sequence 89, Application US/10667022
Sequence 89, Application US/10667022
Sequence 89, Application US/10667022
Sequence 89, Application US/10667022
Sequence 89, Application US/10667021
GENERAL INFORMATION:
APPLICANT: Kenneth W. Dobie
TITLE OF INVENTION: PAISENSE MODULATION OF PHOSPHOINOSITIDE-3-KINASE, REGULATORY SUE
TITLE OF INVENTION: PLSO EXPRESSION
FILE REFERENCE: RTS-0376
CURRENT APPLICATION NUMBER: US/10/667,022
CURRENT FILING DATE: 2003-09-18
NUMBER OF SEQ ID NOS: 147
SEQUENCE OF SEQ ID NOS: 147
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     0.4%; Score 20; DB 1; Length 20; ilarity 100.0%; Pred. No. 2.6e+02; Conservative 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Length 20;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Score 20; DB 1; L
Pred. No. 2.6e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   0.4%; bred. No. ...
100.0%; Pred. No. ...
                                                                                                                                                                                                                                                                                                                                                                                                    ; OTHER INFORMATION: Antisense Oligonucleotide
US-10-667-022-88
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                4823 CTTATGCATCTCTTTGCAAG 4842
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CGTTTGCTGGGGCTGCAGCA 62
                                                                                                                                                                                                                                                                                                                                     TYPE: DNA ORGANISM: Artificial Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           20; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ORGANISM: H. sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Best Local Similarity
Matches 20; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     US-10-667-022-89
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         43
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TYPE: DNA
                                                                                                                                                                                                                                                                                                                                                                                    FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          g
```

```
Sequence 96, Application US/10667022

Publication No. US20040063657A1

GENERAL INFORMATION:
GENERAL INFORMATION:
APPLICANT: Susan M. Freier
APPLICANT: Manan M. Probie
TITLE OF INVENTION: ANTISENSE MODULATION OF PHOSPHOINOSITIDE-3-KINASE, REGULATORY SUBL.
TITLE OF INVENTION: P150 EXPRESSION
TITLE REPERENCE: RTS-0376
CURRENT APPLICATION NUMBER: US/10/667,022
CURRENT FILING DATE: 2003-09-18
NUMBER: OF SEQ ID NOS: 147
SEQ ID NO 96
LENGTH: 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sequence 97, Application US/10667022;
Publication No. US20040063557A1
GENERAL INFORMATION:
APPLICANT: Susan M. Freier
APPLICANT: Kenneth W. Dobie
TITLE OF INVENTION: ANTISENSE MODULATION OF PHOSPHOINOSITIDE-3-KINASE, REGULATORY SUBFILITIE OF INVENTION: PL50 EXPRESSION
TITLE OF INVENTION: D150 EXPRESSION
TITLE REFERENCE: RTS-0376
CURRENT APPLICATION NUMBER: US/10/667,022
CURRENT FILING DATE: 2003-09-18
NUMBER OF SEQ ID NOS: 147
SEQ ID NO 97
IENGTH: 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ö
                                                                                                                                                                                                                      ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Gaps
                                                                                                                                                                                                                      Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 .;
0
                                                                                                                                                                                                                      ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  0.4%; Score 20; DB 1; Length 20;
100.0%; Pred. No. 2.6e+02;
iive 0; Mismatches 0; Indels
                                                                                                                                                   DB 1; Length 20; 2.6e+02; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Query Match 0.4%; Score 20; DB 1; Length 20; Best Local Similarity 100.0%; Pred. No. 2.6e+02; Matches 20; Conservative 0; Mismatches 0; Indels
                                                                                                                                                                              100.0%; Preu. ...
                                                                                                                                                         0.4%; Score 20;
100.0%; Pred. No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    824 CITICCAGAAAGCAICAGAA 843
                                                                                                                                                                                                                                                                                     703 CGAGAAGGCCTGGTCGTTGT 722
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             780 GGAGGAACTGAAATCAGGC 799
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CTTTCCAGAAAGCATCAGAA 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1 GGAGGAACTGAAAATCAGGC 20
                                                                                                                                                                                                                                                                                                                                                 1 ceaedadecerdereerrer 20
                                                                                                                                                   Ouery Match
Best Local Similarity 100.C
Matches 20, Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        20; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TYPE: DNA
ORGANISM: H. sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TYPE: DNA
ORGANISM: H. sapiens
TYPE: DNA
ORGANISM: H. sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Query Match
Best Local Similarity
Matches 20; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                      RESULT 358
US-10-667-022-96
                                                                                             US-10-667-022-95
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                US-10-667-022-97
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     US-10-667-022-96
                                                                  FEATURE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     RESULT 360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                셤
                                                                                                                                                                                                                                                                                               ઠે
                                                                                                                                                                                                                                                                                                                                                     d
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Sequence 95, Application US/10667022
Publication No. US20040063657A1
GENERAL INFORMATION:
GENERAL INFORMATION:
APPLICANT: Suean M. Freier
APPLICANT: Sean M. Freier
TITLE OF INVENTION: ANTISENSE MODULATION OF PHOSPHOINOSITIDE-3-KINASE, REGULATORY SUE
TITLE OF INVENTION: P150 EXPRESSION
FILE REFERENCE: RTS-0376
CURRENT APPLICATION NUMBER: US/10/667,022
CURRENT APPLICATION NUMBER: US/10/667,022
CURRENT FILING DATE: 2003-09-18
NUMBER OF SEQ ID NOS: 147
SEQ ID NO 95
LENGTH: 20
                                 US-10-667-022-93
US-10-667-022-93
Sequence 93, Application US/10667022
Publication No. US20040063657A1
GENERAL INFORMATION:
APPLICANT: Susan M. Freier
APPLICANT: Kenneth W. Doble
TITLE OF INVENTION: P150 EXPRESSION
TITLE OF INVENTION
TITLE OF
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Sequence 94, Application US/10667022
Publication No. US20040063657A1
GENERAL INFORMATION:
APPLICANT: Susan M. Freier
APPLICANT: Kenneth W. Dobie
TITLE OF INVENTION: P150 EXPRESSION
FILE REFERENCE: RTS-0376
CURRENT APPLICATION NUMBER: US/10/667,022
CURRENT APPLICATION NUMBER: 2003-09-18
NUMBER OF SEQ ID NOS: 147
SEQ ID NO 94
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     0.4%; Score 20; DB 1; Length 20; 100.0%; Pred. No. 2.6e+02; ive 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Query Match 0.4%; Score 20; DB 1; Length 20; Best Local Similarity 100.0%; Pred. No. 2.6e+02; Matches 20; Conservative 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           559 CTTGCCATTATGGGAAATCA 578
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       534 AACCITACTAAAGACCACAG 553
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1 AACCTTACTAAAGACCACAG 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Query Match 0.4
Best Local Similarity 100.
Matches 20; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TYPE: DNA ORGANISM: H. sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TYPE: DNA
ORGANISM: H. sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       US-10-667-022-95
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 RESULT 356
US-10-667-022-94
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               US-10-667-022-93
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                US-10-667-022-94
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  FEATURE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Š
```

```
Sequence 101, Application US/10667022

Publication No. US20040063657A1

GENERAL INFORMATION:
GENERAL INFORMATION:
GENERAL INFORMATION:
APPLICANT: Susan M. Freier
APPLICANT: Kenneth W. Dobie
TITLE OF INVENTION: ANTISENSE MODULATION OF PHOSPHOINOSITIDE-3-KINASE, REGULATORY SUBITITIES OF INVENTION: PLSO EXPRESSION
FILE REPERENCE: RTS-0376
CURRENT APPLICATION NUMBER: US/10/667,022
CURRENT FILING DATE: 2003-09-18
NUMBER OF SEQ ID NOS: 147

SEQ ID NO 101
LENGTH: 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Sequence 102, Application US/10667022

Publication No. US20040063657A1

GENERAL INFORMATION:
GENERAL INFORMATION:
APPLICANT: Susan M. Freier
APPLICANT: Kenneth W. Dobie
TITLE OF INVENTION: ANTISENSE MODULATION OF PHOSPHOINOSITIDE-3-KINASE, REGULATORY SUBITILE OF INVENTION: ANTISENSE MODULATION OF PHOSPHOINOSITIDE-3-KINASE, REGULATORY SUBITILE REFERENCE: RTS-0376
CURRENT APPLICATION NUMBER: US/10/667,022
CURRENT FILING DATE: 2003-09-18
NUMBER OF SEQ ID NOS: 147

SEQ ID NO 102
LENGTH: 20
                                                                                                                                                          ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ô
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Gарв
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Gapa
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   0.4%; Score 20; DB 1; Length 20; 100.0%; Pred. No. 2.6e+02; ive 0; Mismatches 0; Indels
                                                                                                       Length 20;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Query Match 0.4%; Score 20; DB 1; Length 20; Best Local Similarity 100.0%; Pred. No. 2.6e+02; Matches 20; Conservative 0; Mismatches 0; Indels
                                                                                                     Query Match 0.4%; Score 20; DB 1; Ler
Best Local Similarity 100.0%; Pred. No. 2.6e+02;
Matches 20; Conservative 0; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          998 TTCGTCATGGGGACATCAAG 1017
                                                                                                                                                                                                          982 GCACACAAATCTGGAGTTCG 1001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1032 GGTCACCAGTTGGAATTGGG 1051
                                                                                                                                                                                                                                                         1 GCACACAATCTGGAGTTCG 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Query Match
Best Local Similarity 100.0
Matches 20; Conservative
     ; ORGANISM: H. sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TYPE: DNA
ORGANISM: H. sapiens
FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ORGANISM: H. sapiens
FEATURE:
                                                     US-10-667-022-100
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  US-10-667-022-102
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        RESULT 365
US-10-667-022-103
                                                                                                                                                                                                                                                                                                                                                              US-10-667-022-101
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      US-10-667-022-102
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     US-10-667-022-101
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       RESULT 364
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       g
                                                                                                                                                                                                          ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              RESULT 361
US-10-667-022-99
is Sequence 99, Application US/10667022
is Publication No. USZ0040063657A1
general information:
is APPLICANT: Susan M. Freier
is APPLICANT: Susan M. Preier
is APPLICANT: Kenneth W. Dobie
is TILLE OF INVENTION: ANTISENSE MODULATION OF PHOSPHOINOSITIDE-3-KINASE, REGULATORY SUB-
is TILLE OF INVENTION: P150 EXPRESSION
is FILLE REFERENCE: RTS-0376
is CURRENT APPLICATION NUMBER: US/10/667,022
is CURRENT FILLING DATE: 2003-09-18
is NUMBER OF SEQ ID NOS: 147
is SEQ ID NO 99
itendial 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Sequence 100, Application US/10667022
| Publication No. US20040063657A1
| GENERAL INFORMATION:
| GENERAL INFORMATION:
| APPLICANT: Kenneth W. Dolie
| TITLE OF INVENTION: PLSO EXPRESSION PIT REFERENCE: REFERENCE: REGULATORY SUB-
| TITLE OF INVENTION: PLSO EXPRESSION PRINT APPLICATION NUMBER: US/10/667,022
| CURRENT PILING DATE: 2003-09-18
| SEQ ID NOS: 147
                  Sequence 98, Application US/10667022

Publication No. US20040063657A1

Publication No. US20040063657A1

APPLICANT: Susan M. Freier

APPLICANT: Kenneth W. Dobie

TITLE OF INVENTION: ANTISENSE MODULATION OF PHOSPHOINOSITIDE-3-KINASE, REGULATORY SUB-
TITLE OF INVENTION: ANTISENSE MODULATION OF PHOSPHOINOSITIDE-3-KINASE, REGULATORY SUB-
TITLE OF INVENTION: DISO EXPRESSION
FILE REPERENCE: RTS-0376

CURRENT APPLICATION NUMBER: US/10/667,022

CURRENT FILING DATE: 2003-09-18

NUMBER OF SEQ ID NOS: 147
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ó
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    0.4%; Score 20; DB 1; Length 20; 100.0%; Pred. No. 2.6e+02; tive 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   0.4%; Score 20; DB 1; Length 20;
100.0%; Pred. No. 2.6e+02;
tive 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           875 GGCAGTATGTGCGAGACAAT 894
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         914 CCCGTCCATTCTTGAATAAC 933
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1 cccerccarrerreadrade 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Query Match
Best Local Similarity 100.0
Matches 20; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Query Match
Best Local Similarity 100.(
Matches 20; Conservative
                                                                                                                                                                                                                                                                                                                                                         TYPE: DNA
ORGANISM: H. sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      RESULT 362
US-10-667-022-100
US-10-667-022-98
                                                                                                                                                                                                                                                                                                                                                                                                                                    US-10-667-022-98
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      a
```

```
US-10-667-022-106
US-10-667-022-106
Sequence 106, Application US/10667022
Sequence 106, Application No. US20040063657A1
Seguence 106, No. US20040063657A1
September 1 W. Dobie
TITLE OF INVENTION: ANTISENSE MODULATION OF PHOSPHOINOSITIDE-3-KINASE, REGULATORY SUBITILE OF INVENTION: P150 EXPRESSION
TITLE OF INVENTION: P150 EXPRESSION
TITLE OF INVENTION UNMBER: US/10/667,022
CURRENT PPLICATION UNMBER: 2033-09-18
NUMBER OF SEQ ID NOS: 147
FEASOLID NOS: 147
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Sequence 107, Application US/10667022

| Bublication No. US20040063657A1
| Publication No. US20040063657A1
| CENERAL INFORMATION:
| APPLICANT: Susan M. Freier
| APPLICANT: Kenneth W. Dobis
| TITLE OF INVENTION: ANTISENSE MODULATION OF PHOSPHOINOSITIDE-3-KINASE, REGULATORY SUBITILE OF INVENTION: B150 EXPRESSION
| FILE REFERENCE: RTS-0376
| CURRENT APPLICATION UNBER: US/10/667,022
| CURRENT FILING DATE: 2003-09-18
| NUMBER OF SEQ ID NOS: 147
| SEQ ID NO 107
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ö
                                                                                                                         ö
                                                                                                                            Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ö
                                                                                                                            .
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        0.4%; Score 20; DB 1; Length 20;
100.0%; Pred. No. 2.6e+02;
tive 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Length 20;
                                                                             Length 20;
                                                                                                                            0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    DB 1; Le
2.6e+02;
                                                                             DB 1; Le
2.6e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Query Match 0.4%; Score 20; DB Best Local Similarity 100.0%; Pred. No. 2.6 Matches 20; Conservative 0; Mismatches
                                                                           Query Match 0.4%; Score 20; DB Best Local Similarity 100.0%; Pred. No. 2.6 Matches 20; Conservative 0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       RESULT 370
US-10-667-022-108
; Sequence 108, Application US/10667022
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1498 CAGCGTGGCAATGCCTTTCC 1517
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1414 GATCACAGTATCAGAGAATT 1433
                                                                                                                                                                                1299 AGGITGIGIGATAGCIGAGC 1318
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1 GATCACAGTATCAGAGAATT 20
                                                                                                                                                                                                                            1 AGGTTGTGTGATAGCTGAGC 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              20; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TYPE: DNA
ORGANISM: H. sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TYPE: DNA ORGANISM: H. sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Query Match
Best Local Similarity
Matches 20; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    US-10-667-022-107
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          US-10-667-022-106
            ; FEATURE:
US-10-667-022-105
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        엄
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ð
                                                                                                                                                                                        à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Sequence 104, Application US/10667022
Publication No. US20040063657A1
GENERAL INFORMATION:
GENERAL INFORMATION:
GENERAL INFORMATION:
APPLICANT: Kenneth W. Dobie
TITLE OF INVENTION: ANTISENSE MODULATION OF PHOSPHOINOSITIDE-3-KINASE, REGULATORY SUBTITLE OF INVENTION: ANTISENSE MODULATION OF PHOSPHOINOSITIDE-3-KINASE, REGULATORY SUBTITLE OF INVENTION: ANTISENSE NOD 104
TITLE OF INVENTION: ANTISENSE NOD 104
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                RESULT 367
US-10-667-022-105
Sequence 105, Application US/10667022
Publication No. US20040063657A1
GENERAL INFORMATION:
GENERAL INFORMATION:
APPLICANT: Susan M. Preier
TITLE OF INVENTION: P150 EXPRESSION
TITLE OF INVENTION: P150 EXPRESSION
TITLE OF INVENTION: P150 EXPRESSION
CURRENT APPLICATION NUMBER: US/10/667,022
CURRENT FILING DATE: 2003-09-18
NOWHER OF SEQ ID NOS: 147
Sequence 103, Application US/10667022

Publication No. US20040063657A1

GENERAL INFORMATION:
GENERAL INFORMATION:
GENERAL INFORMATION:
TAPPLICANT: Subsan M. Preier
APPLICANT: Kenneth W. Dobie
TITLE OF INVENTION: P150 EXPRESSION
FILE REFERENCE: RTS-0376
CURRENT APPLICATION NUMBER: US/10/667,022
CURRENT FILING DATE: 2003-09-18
NUMBER OF SEQ ID NOS: 147
SEQ ID NO 103
LENGTH: 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ..
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ..
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Query Match 0.4%; Score 20; DB 1; Length 20; Best Local Similarity 100.0%; Pred. No. 2.6e+02; Matches 20; Conservative 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                             Length 20;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                             0.4%; Score 20; DB 1; Le
100.0%; Pred. No. 2.6e+02;
iive 0; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1268 AGTTGAAGAGAGCAATGGAC 1287
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1083 CACTTATCTTCCAGAGACA 1102
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1 AGTTGAAGAGGCAATGGAC 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 cacriricriccagaagaca 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Best Local Similarity 100.
Matches 20; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TYPE: DNA
ORGANISM: H. sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ORGANISM: H. sapiens
                                                                                                                                                                                                                                                                                                                                                TYPE: DNA
ORGANISM: H. sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 RESULT 366
US-10-667-022-104
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             US-10-667-022-104
                                                                                                                                                                                                                                                                                                                                                                                             ; FEATURE:
US-10-667-022-103
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             SEQ ID NO 105
LENGTH: 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        FEATURE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ठ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          В
```

```
Sequence 111, Application US/10667022

Publication No. US20040063657A1

GENERAL INFORMATION:
APPLICANT: Susan M. Freier
APPLICANT: Renneth W. Dobie
TITLE OF INVENTION: ANTISENSE MODULATION OF PHOSPHOINOSITIDE-3-KINASE, RECULATORY SUBI
TITLE OF INVENTION: P150 EXPRESSION
TITLE OF INVENTION: P150 EXPRESSION
CURRENT APPLICATION NUMBER: US/10/667,022
CURRENT APPLICATION NUMBER: 2003-09-18
NUMBER OF SEQ ID NOS: 147
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Sequence 112, Application US/10667022
Publication No. US20040063657A1
GENERAL INFORMATION:
GENERAL INFORMATION:
APPLICANT: Kenneth W. Dobie
TITLE OF INVENTION: ANTISENSE MODULATION OF PHOSPHOINOSITIDE-1-KINASE, REGULATORY SUBITITLE OF INVENTION: P150 EXPRESSION
FILE REFERENCE: RTS-0376
CURRENT APPLICATION NUMBER: US/10/667,022
CURRENT APPLICATION NUMBER: US/10/667,022
NUMBER OF SEQ ID NOS: 147
SEQ ID NO 112
LENGTH: 20
                                                                                                    ô
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ö
                                                                                                    Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Gape
                                                                                                      ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ö
                                                     Length 20;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Length 20;
                                                                                                    0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Length 20;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         DB 1; Ler
. 2.6e+02;
ches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Query Match
0.4%; Score 20; DB 1; Le
Best Local Similarity 100.0%; Pred. No. 2.6e+02;
Matches 20; Conservative 0; Mismatches 0;
                                                     Query Match 0.4%; Score 20; DB 1; Le
Best Local Similarity 100.0%; Pred. No. 2.6e+02;
Matches 20; Conservative 0; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Query Match
0.4%; Score 20; DB
Best Local Similarity 100.0%; Pred. No. 2.6
Matches 20; Conservative 0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ; Sequence 113, Application US/10667022
; Publication No. US20040063657A1
                                                                                                                                                  1706 CTGTTATAACATCCTGCCTA 1725
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1978 GCCCAAGATGATGCTACTAT 1997
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              2041 ACAGCTCTGAGATTCCTGGA 2060
                                                                                                                                                                                            1 crerraracarccrecta 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1 GCCCAAGATGATGCTACTAT 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1 ACAGCICIGAGATICCIGGA 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TYPE: DNA
ORGANISM: H. sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TYPE: DNA
ORGANISM: H. Bapiens
         US-10-667-022-110
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            RESULT 375
US-10-667-022-113
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              US-10-667-022-112
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             US-10-667-022-111
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                US-10-667-022-112
                                                                                                                                                                                                                                                                                        US-10-667-022-111
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        SEQ ID NO 111
LENGTH: 20
                                                                                                                                                  ઠે
                                                                                                                                                                                         셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ઠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        셤
                                           APPLICANT: Susan M. Preier
APPLICANT: Susan M. Preier
APPLICANT: Susan M. Preier
APPLICANT: Senneth W. Dobie
TITLE OF INVENTION: ANTISENSE MODULATION OF PHOSPHOINOSITIDE-3-KINASE, REGULATORY SUB-
TITLE OF INVENTION: P150 EXPRESSION
FILE REFERENCE: RTS-0376
CURRENT PILING NUMBER: US/10/667,022
CURRENT FILING DATE: 2003-09-18
NUMBER OF SEQ ID NOS: 147
SEQ ID NO 108
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Sequence 109, Application US/10667022
Publication No. US20040063657A1
GENERAL INFORMATION:
APPLICANT: Susan M. Freier
APPLICANT: Kenneth W. Dobie
TITLE OF INVENTION: ANTISENSE MODULATION OF PHOSPHOINOSITIDE-3-KINASE, REGULATORY SUB-
FILE REPERENCE: RTS-0376
CURRENT APPLICATION NUMBER: US/10/667,022
CURRENT PILING DATE: 2003-09-18
NUMBER OF SEQ ID NOS: 147
SEQ ID NO 109
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Sequence 110, Application US/10667022
Publication No. US20040063657A1
GENERAL INFORMATION:
GENERAL INFORMATION:
GENERAL INFORMATION:
APPLICANT: Susan P. Freier
APPLICANT: Renneth W. Dobie
TITLE OF INVENTION: ANTISENSE MODULATION OF PHOSPHOINOSITIDE-3-KINASE, REGULATORY SUBTILLE OF INVENTION: PL50 EXPRESSION
FILE REFERENCE: RTS-0376
CURRENT APPLICATION NUMBER: US/10/667,022
CURRENT FILING DATE: 2003-09-18
NUMBER OF SEQ ID NOS: 147
                                                                                                                                                                                                                                                                                                                                                                                                                                                       ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                       Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                       ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ö
                                                                                                                                                                                                                                                                                                                                                                                                      Score 20; DB 1; Length 20;
Pred. No. 2.6e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Query Match 0.4%; Score 20; DB 1; Length 20; Best Local Similarity 100.0%; Pred. No. 2.6e+02; Matches 20; Conservative 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                     0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                 Query Match 0.4%; Score 20; DB Best Local Similarity 100.0%; Pred. No. 2.6 Matches 20; Conservative 0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1630 CACAATCTCTGTGGACATGA 1649
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1658 AAAAGCCGAAGGAGACCT 1677
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1 cacaarcrcrcrcrcacarca 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1 AAAAAGCCGAAGGAGAGCCT 20
Publication No. US20040063657A1
GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                    TYPE: DNA
ORGANISM: H. sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TYPE: DNA
ORGANISM: H. sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TYPE: DNA
ORGANISM: H. sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       RESULT 372
US-10-667-022-110
                                                                                                                                                                                                                                                                                                                                                      US-10-667-022-108
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            US-10-667-022-109
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              US-10-667-022-109
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          LENGTH: 20
                                                                                                                                                                                                                                                                                                                                  FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     g
```

```
RESULT 378

US-10-667-022-116

US-10-667-022-116

Sequence 116, Application US/10667022

Publication No. US20040063657A1

GENERAL INFORMATION:

APPLICANT: Susan M. Freier

APPLICANT: Kenneth W. Dobie

TITLE OF INVENTION: P150 EXPRESSION

TITLE OF INVENTION: P150 EXPRESSION

FILE REFERENCE: RTS-0376

CURRENT FILING DATE: 2003-09-18

NUMBER OF SQL ID NOS: 147

SEQUENCE OF SQL ID NOS: 147
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Sequence 117, Application US/10667022
| Sequence 117, Application US/10667022
| Publication No. US20040063657A1
| GENERAL INFORMATION:
| APPLICANT: Susan M. Freier
| APPLICANT: Kenneth W. Dobie TITLE OF INVENTION: ANTISENSE MODULATION OF PHOSPHOINOSITIDE-3-KINASE, REGULATORY SUBITITLE OF INVENTION: ANTISENSE MODULATION OF PHOSPHOINOSITIDE-3-KINASE, REGULATORY SUBITITLE OF INVENTION: ANTISENSE WORLS: RTS-0376
| CURRENT APPLICATION NUMBER: US/10/667,022
| CURRENT APPLICATION NUMBER: 2003-09-18
| SEQ ID NO 117
| LENGRIH: 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ö
                                                                    ö
                                                                        Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ..
0
                                                                        ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Query Match 0.4%; Score 20; DB 1; Length 20; Best Local Similarity 100.0%; Pred. No. 2.6e+02; Matches 20; Conservative 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Query Match 0.4%; Score 20; DB 1; Length 20; Best Local Similarity 100.0%; Pred. No. 2.6e+02; Matches 20; Conservative 0; Mismatches 0; Indels
Query Match 0.4%; Score 20; DB 1; Length 20; Best Local Similarity 100.0%; Pred. No. 2.6e+02; Matches 20; Conservative 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           US-10-667-022-118
; Sequence 118, Application US/10667022
; Publication No. US20040063657A1
; GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 2524 GTTTACGAATTTGCCAGTGA 2543
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  2438 TTAGTGATGCTGAGGAATTT 2457
                                                                                                                                                2391 TGGCTGGCAAAGCTCCTCAA 2410
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1 TTAGTGATGCTGAGGAATTT 20
                                                                                                                                                                                       1 TGGCTGGCAAAGCTCCTCAA 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TYPE: DNA
ORGANISM: H. sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TYPE: DNA ORGANISM: H. sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ÚS-10-667-022-117
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                US-10-667-022-116
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  RESULT 380
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ò
                                                                                                                                                                                                                        g
                                                                                                                                                              ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Sequence 115, Application US/10667022

Publication No. US20040063657A1

GENERAL INFORMATION:
APPLICANT: Susan M. Freier
APPLICANT: Susan M. Freier
APPLICANT: Kenneth W. Dobie
TITLE OF INVENTION: P150 EXPRESSION
TITLE OF INVENTION: P150 EXPRESSION
TITLE OF INVENTION: P150 EXPRESSION
TITLE OF INVENTION: D150 EXPRESSION
TITLE OF INVENTION: P150 EXPRESSION
TITLE OF INVENTION
TITLE OF INVENTION: P150 EXPRESSION
TITLE OF INVENTION
TITLE OF INVENTION
TITLE OF INVENTION
TITLE OF INVENTION
TITLE OF INV
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Sequence 114, Application US/10667022

Sequence 114, Application US/10667022

Publication No. US20040063657A1

GRNERAL INFORMATION:
APPLICANT: Susan M. Freier
APPLICANT: Kenneth W. Dobie
TITLE OF INVENTION: PLSO EXPRESSION
TITLE OF INVENTION: PLSO EXPRESSION
FILE REPERENCE: RTS-0376
CURRENT APPLICATION NUMBER: US/10/667,022
CURRENT FILING DATE: 2003-09-18
NUMBER OF SEQ ID NOS: 147
SEQ ID NO 114
       APPLICANT: Susan M. Freier
APPLICANT: Kenneth W. Dobie
TITLE OF INVENTION: ANTISENSE MODULATION OF PHOSPHOINOSITIDE-3-KINASE, REGULATORY SUB-
TITLE OF INVENTION: P150 EXPRESSION
FILE REFERENCE: RTS-0376
CURRENT APPLICATION NUMBER: US/10/667,022
CURRENT APPLICATION NUMBER: 12003-09-18
NUMBER OF SEQ ID NOS: 147
SEQ ID NO 113
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     .
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  .
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Query Match 0.4%; Score 20; DB 1; Length 20; Best Local Similarity 100.0%; Pred. No. 2.6e+02; Matches 20; Conservative 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Length 20;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Ouery Match 0.4%; Score 20; DB 1; Lé
Best Local Similarity 100.0%; Pred. No. 2.6e+02;
Matches 20; Conservative 0; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         2131 CCAAATGGAAATTATGACAC 2150
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                2080 CTTAATATGGAAAATGACCC 2099
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1 ccaparggaaarrargacac 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CTTAATATGGAAAATGACCC 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TYPE: DNA ORGANISM: H. sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TYPE: DNA
ORGANISM: H. sapiens
                                                                                                                                                                                                                                                                                                                                                                                   TYPE: DNA ORGANISM: H. sapiens
   GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   RESULT 377
US-10-667-022-115
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         US-10-667-022-115
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          US-10-667-022-114
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        US-10-667-022-113
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      FEATURE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     LENGTH:
                                                                                                                                                                                                                                                                                                                                                                                                                                                       FEATURE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              음
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        d
```

```
Sequence 121, Application US/10667022
Publication No. US20040063657A1
GENERAL INFORMATION:
APPLICANT: Susan M. Ereier
APPLICANT: Kenneth W. Dobie
TITLE OF INVENTION: ANTISENSE MODULATION OF PHOSPHOINOSITIDE-3-KINASE, REGULATORY SUBITITLE OF INVENTION: P150 EXPRESSION
FILE REFERENCE: RTS-0376
CURRENT APPLICATION NUMBER: US/10/667,022
CURRENT APPLICATION NUMBER: US/10/667,022
NUMBER OF SEQ ID NOS: 147
SEQ ID NO 121
LENGTH: 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Sequence 122, Application US/10667022
Publication No. US20040063657A1
GENERAL INFORMATION:
APPLICANT: Susan M. Freier
APPLICANT: Kenneth W. Dobie
TITLE OF INVENTION: PISO EXPRESSION
TITLE OF INVENTION: PISO EXPRESSION
FILE REFERENCE: RTS-0376
CURRENT APPLICATION NUMBER: US/10/667,022
CURRENT FILING DATE: 2003-09-18
NUMBER OF SEQ ID NOS: 147
LENGTH: 20
                                                     ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ô
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Gaps
                                                       Gaps
                                                     ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ö
      0.4%; Score 20; DB 1; Length 20;
100.0%; Pred. No. 2.6e+02;
tive 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          DB 1; Length 20;
2.6e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Length 20;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Query Match
0.4%; Score 20; DB 1; Le
Best Local Similarity 100.0%; Pred. No. 2.6e+02;
Matches 20; Conservative 0; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   100.0%; Prec. ...
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          0.4%; Score 20;
00.0%; Pred. No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Sequence 123, Application US/10667022; Publication No. US20040063657A1
GENERAL INFORMATION: APPLICANT: SUBBAN M. Freier
                                                                                              2731 GAACCAGTAAGTCGTTCTAT 2750
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                2843 GCCCTCCGCCAGAGGATCCT 2862
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 2860 CCTGCCATAGCACAGCTTCT 2879
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Query Match
Best Local Similarity 100.0
Matches 20; Conservative
                                                  20; Conservative
                         Best Local Similarity
Matches 20; Conserva
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ORGANISM: H. sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TYPE: DNA
ORGANISM: H. sapiens
                                                                                                                                                                                                                             US-10-667-022-121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            JS-10-667-022-122
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ; FEATURE:
US-10-667-022-122
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     US-10-667-022-123
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ; FEATURE:
US-10-667-022-121
         Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TYPE: DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              RESULT 385
                                                                                              ઠે
                                                                                                                                     셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               APPLICANT: Susan M. Freier
APPLICANT: Susan M. Freier
APPLICANT: Kenneth M. Dobie
TITLE OF INVENTION: ANTISENSE MODULATION OF PHOSPHOINOSITIDE-3-KINASE, REGULATORY SUE
TITLE OF INVENTION: P150 EXPRESSION
FILE REFERENCE: RTS-0376
CURRENT APPLICATION NUMBER: US/10/667,022
CURRENT FILING DATE: 2003-09-18
NUMBER OF SEQ ID NOS: 147
SEQ ID NO 119
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         US-10-67-022-120

Sequence 120, Application US/10667022

Sequence 120, Application US/10667022

Sequence 120, Application US/10667022

Sequence 120, Application US/10667022

GENERAL INFORMATION:

APPLICANT: Stenneth W. Dobje

APPLICANT: Kenneth W. Dobje

TITLE OF INVENTION: PLSO EXPRESSION

TITLE OF INVENTION: PLSO EXPRESSION

FILE REFERENCE: RTS-0376

CURRENT APPLICATION UNMBER: US/10/667,022

CURRENT FILING DATE: 2003-09-18

NUMBER OF SEQ ID NOS: 147

SEQ ID NO 120
                                                  SUE
APPLICANT: Sugan M. Freier
APPLICANT: Kenneth W. Dobie
TITLE OF INVENTION: ANTISENSE MODULATION OF PHOSPHOINOSITIDE-3-KINASE, REGULATORY
TITLE OF INVENTION: P150 EXPRESSION
                                                                                                                                                                                                                                                                                                                                                                                     ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ö
                                                                                                                                                                                                                                                                                                                                                                                     Gapa
                                                                                                                                                                                                                                                                                                                                                                                     ô
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ö
                                                                                                                                                                                                                                                                                                                                          Length 20;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Length 20;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         DB 1; Le . 2.6e+02;
                                                                                                                                                                                                                                                                                                                                       DB 1; Le
2.6e+02;
                                                                                                                                                                                                                                                                                                                                   Query Match 0.4%; Score 20; DB Best Local Similarity 100.0%; Pred. No. 2.6 Matches 20; Conservative 0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Query Match 0.4%; Score 20; DB Best Local Similarity 100.0%; Pred. No. 2.6 Matches 20; Conservative 0; Mismatches
                                                                                PILE REFERENCE: RTS-0376
CURRENT APPLICATION NUMBER: US/10/667,022
CURRENT FILING DATE: 2003-09-18
NUMBER OF SEQ ID NOS: 147
LENGTH: 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Sequence 119, Application US/10667022; Publication No. US20040063657A1; GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                          2555 TCCTGTGTCATCCCAATTTA 2574
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              2587 GGTGCCGTGGGATTTATCAC 2606
                                                                                                                                                                                                                                                                                                                                                                                                                                                    1 rccrgrgrcarcccaarrra 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1 Gerécérégéartrarcae 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TYPE: DNA
ORGANISM: H. sapiens
                                                                                                                                                                                                                           TYPE: DNA
ORGANISM: H. sapiens
                                                                                                                                                                                                                                                                                           US-10-667-022-118
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             US-10-667-022-119
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ; FEATURE:
US-10-667-022-120
                                                                                                                                                                                                                                                                                                                                                                                                                             ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                               a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        셤
```

```
Sequence 126, Application US/10667022

Sequence 126, Application US/10667022

GENERAL INFORMATION:
GENERAL INFORMATION:
APPLICANT: Kenneth W. Dobie
TITLE OF INVENTION: ANTIERNER MODULATION OF PHOSPHOINOSITIDE-3-KINASE, REGULATORY SUBLATILE OF INVENTION: ANTIERNER MODULATION OF PHOSPHOINOSITIDE-3-KINASE, REGULATORY SUBLATILE REFERENCE: RTS-0376
CURRENT APPLICANION NUMBER: US/10/667,022
CURRENT APPLICANION NUMBER: US/10/667,022
CURRENT PILING DATE: 2003-09-18
NUMBER OF SEQ ID NOS: 147
SEQ ID NO 126
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         RESULT 389

US-10-667-022-127

US-10-667-022-127

Sequence 127, Application US/10667022

Publication No. US20040063657A1

GENERAL INFORMATION:

APPLICANT: Suban M. Freier

APPLICANT: Nemach W. Dobie

TITLE OF INVENTION: ANTISENSE MODULATION OF PHOSPHOINOSITIDE-3-KINASE, REGULATORY SUBITILE DE INVENTION: PL50 EXPRESSION

TITLE OF INVENTION: NUMBER: US/10/667,022

CURRENT APPLICATION NUMBER: US/10/667,022

CURRENT FILING DATE: 2003-09-18

NUMBER OF SEQ ID NOS: 147

SEQ ID NO 127

LENGTH: 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ö
                    ;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Gaps
                      Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        .
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ö
                      ;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Score 20; DB 1; Length 20;
Pred. No. 2.6e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Length 20;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Indels
                        Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ch 0.4%; Score 20; DB 1; Le 1 Similarity 100.0%; Pred. No. 2.6e+02; 20; Conservative 0; Mismatches 0;
100.0%; Pred. No. 2.6e+02; tive 0; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Query Match 0.4%; Score 20; DB Best Local Similarity 100.0%; Pred. No. 2.6 Matches 20; Conservative 0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                RESULT 390
US-10-667-022-128
US-10-667-022-128
Sequence 128, Application US/10667022
Publication No. US20040063657A1
GENERAL INFORMATION:
APPLICANT: Susan M. Freier
APPLICANT: Kenneth W. Dobie
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     3318 AAAACCAGTAATACCGGTTT 3337
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      3250 renderedearingrence 3269
                                                                 3057 AGTTGATCTTGTTAAAACCA 3076
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1 TCTGCTGGCATTTGTGTCCC 20
                                                                                                          1 AGTIGATCTIGITAAAACCA 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1 AAAAccaGraaraccGGrrr
  Best Local Similarity 100.09
Matches 20; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TYPE: DNA ORGANISM: H. sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TYPE: DNA
ORGANISM: H. sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Query Match
Best Local Similarity
Matches 20; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           US-10-667-022-127
                                                                                                                                                                                                     US-10-667-022-126
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           US-10-667-022-126
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   셤
                                                                                                               g
                                                                        ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Sequence 125, Application US/10667022

Bellication No. US20040063657A1

GENERAL INFORMATION:
APPLICANT: Sugan M. Freier
TITLE OF INVENTION: ANTISENSE MODULATION OF PHOSPHOINOSITIDE-3-KINASE, REGULATORY SUBTILE OF INVENTION: P150 EXPRESSION
TITLE OF INVENTION: P150 EXPRESSION
TITLE OF INVENTION: NUMBER: US/10/667,022
CURRENT PILING DATE: 2003-09-18
NUMBER OF SEQ ID NOS: 147

SEQ ID NO 125
LENGTH: 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Sequence 124, Application US/10667022
; Sequence 124, Application US/10667022
; Publication No. US2004006367A1
; GENERAL INFORMATION:
    APPLICANT: Susan M. Freier
; APPLICANT: Susan M. Dobie
; TITLE OF INVENTION: P150 EXPRESSION
; TITLE OF INVENTION: P150 EXPRESSION
; FILE REPRENCE: RTS-0376
; CURRENT APPLICATION NUMBER: US/10/667,022
; CURRENT FILING DATE: 2003-09-18
; SEQ ID NOS: 147
; SEQ ID NO 124
  APPLICANT: Kenneth W. Dobie
TITLE OF INVENTION: ANTISENSE MODULATION OF PHOSPHOINOSITIDE-3-KINASE, REGULATORY SUB-
TITLE OF INVENTION: P150 EXPRESSION
TITLE OF INVENTION: P150 EXPRESSION
FILE REFERENCE: RTS-0376
CURRENT APPLICATION NUMBER: US/10/667,022
CURRENT PILING DATE: 2003-09-18
NUMBER OF SEQ ID NOS: 147
SEQ ID NO 123
LENGTH: 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ö
                                                                                                                                                                                                                                                                                                                                                             ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Gaps
                                                                                                                                                                                                                                                                                                                                                                 Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ö
                                                                                                                                                                                                                                                                                                                                                               ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      0.4%; Score 20; DB 1; Length 20;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 0.4%; Score 20; DB 1; Length 20;
100.0%; Pred. No. 2.6e+02;
iive 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                    Score 20; DB 1; Length 20;
Pred. No. 2.6e+02;
                                                                                                                                                                                                                                                                                                         0.4%; Scor.
100.0%; Pred. No. ...
0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        3009 TCAGAAAGGTGTAATTGACT 3028
                                                                                                                                                                                                                                                                                                                                                                                                            2913 AGAGGAAGACAAACTICTGG 2932
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1 rcagaaaggrgraarrgacr 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                   1 AGAGGAAGACAAACTICTGG 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Query Match
Best Local Similarity 100.0
Matches 20; Conservative
                                                                                                                                                                                                                                                                                                                           Query Match 0.4°
Best Local Similarity 100.
Matches 20; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TYPE: DNA
ORGANISM: H. sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TYPE: DNA
ORGANISM: H. sapiens
                                                                                                                                                                                                                                     ORGANISM: H. sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  US-10-667-022-125
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 US-10-667-022-125
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ; FEATURE:
US-10-667-022-124
                                                                                                                                                                                                                                                                                  US-10-667-022-123
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Query Match
                                                                                                                                                                                                                     FYPE: DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               FEATURE
                                                                                                                                                                                                                                                                FEATURE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ò
                                                                                                                                                                                                                                                                                                                                                                                                                   ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                   g
```

```
US-10-667-022-131
) Sequence 131, Application US/10667022
| Publication No. US20040063657A1
| Publication No. US20040063657A1
| GENERAL INFORMATION:
| APPLICANT: Susan M. Freier
| APPLICANT: Kenneth W. Dobie
| TITLE OF INVENTION: P150 EXPRESSION
| TITLE OF INVENTION: P150 EXPRESSION
| TITLE OF INVENTION: P150 EXPRESSION
| CURRENT APPLICATION NUMBER: US/10/667,022
| CURRENT APPLICATION NUMBER: US/10/667,022
| CURRENT PILING DATE: 2003-09-18
| SEQ ID NOS: 147
| LENGTH: 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Sequence 132, Application US/10667022

Sequence 132, Application US/10667022

Publication No. US20040063657A1

GENERAL INFORMATION:

APPLICANT: Susan M. Freier

APPLICANT: Kenneth W. Dobie

TITLE OF INVENTION: ANTISENSE MODULATION OF PHOSPHOINOSITIDE-3-KINAȘE, REGULATORY SUBI

TITLE OF INVENTION: P150 EXPRESSION

FILE REPERENCE: R76-0376

CURRENT APPLICATION NUMBER: US/10/667,022

CURRENT APPLICATION NUMBER: 2003-09-18

NUMBER OF SEQ ID NOS: 147

SEQ ID NO 132
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Sequence 133, Application US/10667022;
Publication No. US20040063657A1;
GENERAL INFORMATION:
APPLICANT: Susan M. Freier;
APPLICANT: Kenneth W. Dobie;
TITLE OF INVENTION: ANTISENSE MODULATION OF PHOSPHOINOSITIDE-3-KINASE, REGULATORY SUBI
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ö
       ö
       Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Gape
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Gape
       ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           0.4%; Score 20; DB 1; Length 20; 100.0%; Pred. No. 2.6e+02; ive 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Length 20;
       Indela
       ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          DB 1; Le
2.6e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Query Match 0.4%; Score 20; DB Best Local Similarity 100.0%; Pred. No. 2.6 Matches 20; Conservative 0; Mismatches
    0; Mismatches
                                                 3431 GCAATGCTGAGAGAATAGCT 3450
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    3455 AGATGATGGAAAATGCTGAA 3474
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       3504 GCGTCCTAAAGGGCTGTTAG 3523
                                                                                            1 GCAATGCTGAGAGAATAGCT 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1 AGATGATGGAAATGCTGAA 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Best Local Similarity 100.
Matches 20; Conservative
       Matches 20; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TYPE: DNA
ORGANISM: H. sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TYPE: DNA ORGANISM: H. sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       RESULT 395
US-10-667-022-133
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 RESULT 394
US-10-667-022-132
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ; FEATURE:
US-10-667-022-131
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  US-10-667-022-132
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             FEATURE
                                                    ð
                                                                                            g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ઠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Sequence 130, Application US/10667022
Publication No. US20040063657A1
GENERAL INFORMATION:
GENERAL INFORMATION:
APPLICANT: Susan M. Freier
TITLE OF INVENTION: ANTISENSE MODULATION OF PHOSPHOINOSITIDE-3-KINASE, REGULATORY SUF
TITLE OF INVENTION: PISO EXPRESSION
FILE REFERENCE: RTG-0376
CURRENT APPLICATION NUMBER: US/10/667,022
CURRENT PILING DATE: 2003-09-18
NUMBER OF SEQ ID NOS: 147
SEQ ID NO 130
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sequence 129, Application US/10667022
Publication No. US20040063657A1
GENERAL INFORMATION:
APPLICANT: Susan M. Freier
APPLICANT: Kenneth W. Dobie
TITLE OF INVENTION: PL50 EXPRESSION
FILE REFERENCE: RT5-0376
CURRENT APPLICATION NUMBER: US/10/667,022
CURRENT FILE SEQ ID NOS: 147
SEQ ID NO 129
TITLE OF INVENTION: ANTISENSE MODULATION OF PHOSPHOINOSITIDE-3-KINASE, REGULATORY SUB-
TITLE OF INVENTION: P150 EXPRESSION
                                                                                                                                                                                                                                                                                                                                                   ô
                                                                                                                                                                                                                                                                                                                                                   Gaps
                                                                                                                                                                                                                                                                                                                                                   ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ö
                                                                                                                                                                                                                                                                                                 0.4%; Score 20; DB 1; Length 20;
100.0%; Pred. No. 2.6e+02;
iive 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            0.4%; Score 20; DB 1; Length 20; 100.0%; Pred. No. 2.6e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      0.4%; Score 20; DB 1; Length 20;
100.0%; Pred. No. 2.6e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ilarity 100.0%; Pred. No. 2.6
Conservative 0; Mismatches
                                        FILE REFERENCE: RTS-0376
CURRENT APPLICATION NUMBER: US/10/667,022
CURRENT FILING DATE: 2003-09-18
NUMBER OF SEQ ID NOS: 147
SEQ ID NO 128
                                                                                                                                                                                                                                                                                                                                                                                           3341 GTAGTACAATCTTACCATCC 3360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                3388 AAAACTGAACTTCAGCAACT 3407
                                                                                                                                                                                                                                                                                                                                                                                                                          1 GTAGTACAATCTTACCATCC 20
                                                                                                                                                                                                                                                                                                                      Best Local Similarity 100.
Matches 20; Conservative
                                                                                                                                                                                    TYPE: DNA ORGANISM: H. sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TYPE: DNA
ORGANISM: H. sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TYPE: DNA
ORGANISM: H. sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Query Match
Best Local Similarity
Matches 20; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           RESULT 392
US-10-667-022-130
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           RESULT 391
US-10-667-022-129
                                                                                                                                                                                                                                                  US-10-667-022-128
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         US-10-667-022-129
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            US-10-667-022-130
                                                                                                                                                                                                                                                                                                      Query Match
                                                                                                                                                                                                                                   PEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ò
                                                                                                                                                                                                                                                                                                                                                                                             ઠે
```

```
W3-10-667-022-136

Sequence 136, Application US/10667022

Sequence 136, Application US/10667022

Publication No. US20040063657A1

GENERAL INFORMATION:

APPLICANT: Susan M. Freier

APPLICANT: Kenneth W. Dobie

TITLE OF INVENTION: ANTISENSE MODULATION OF PHOSPHOINOSITIDE-3-KINASE, REGULATORY SUBITILE OF INVENTION: P150 EXPRESSION

FILE REFERENCE: RTS-0376

CURRENT APPLICATION UNMBER: US/10/667,022

CURRENT APPLICATION UNMBER: 2003-09-18

NUMBER OF SEQ ID NOS: 147

SEQ ID NO 136
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Sequence 137, Application US/10667022

| Sequence 137, Application US/10667022
| Publication No. US20040063657A1
| GENERAL INFORMATION:
| APPLICANT: Susan M. Freier
| APPLICANT: Kenneth W. Dobie
| TITLE OF INVENTION: P150 EXPRESSION | TITLE OF INVENTION: P150 
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              US-10-67-022-138
Sequence 138, Application US/10667022
Sequence 138, Application US/10667022
Fublication No. US20040063657A1
FIREFAL INFORMATION:
APPLICANT: Susan M. Freier
APPLICANT: Senneth W. Doble
TITLE OF INVENTION: P150 EXPRESSION
TITLE OF INVENTION: P150 EXPRESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           .
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Length 20;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Query Match

0.4%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 2.6e+02;
Matches 20; Conservative 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Score 20; DB 1; Le
Pred. No. 2.6e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             0.4%; Score 20; DB ilarity 100.0%; Pred. No. 2.6 Conservative 0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      3991 GGCCTCATCACTTCCTTTGC 4010
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             3899 TICITGCCTATGCCACTGTG 3918
                   3762 TGTCCAGCTTCTTGGAATTG 3781
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1 GGCCTCATCACTTCCTTTGC 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TICTIGCCTAIGCCACTGIG 20
                                                                           1 rerceaecricirecaarie 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Query Match
Best Local Similarity
Matches 20; Conservat
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TYPE: DNA
ORGANISM: H. sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TYPE: DNA ORGANISM: H. sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               US-10-667-022-136
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        US-10-667-022-137
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    RESULT 400
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     LENGTH:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        임
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           d
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       8
                                                                    q
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Sequence 135, Application US/10667022
Publication No. US20040063657A1
GENERAL INFORMATION:
APPLICANT: Susan M. Freier
APPLICANT: Kenneth W. Dobie
TITLE OF INVENTION: ANTISENSE MODULATION OF PHOSPHOINOSITIDE-3-KINASE, REGULATORY SUBTILLE REFRENCE: RTS-0376
CURRENT APPLICANTON NUMBER: US/10/667,022
CURRENT FILING DATE: 2003-09-18
NUMBER OF SEQ ID NOS: 147
ELENGTH: 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Sequence 134, Application US/10667022
Publication No. US20040063657A1
GENERAL INFORMATION:
APPLICANT: Susan M. Freier
APPLICANT: Kenneth W. Dobie
TITLE OF INVENTION: ANTISENSE MODULATION OF PHOSPHOINOSITIDE-3-KINASE, REGULATORY SUBTILE REFERENCE: RTS-0376
CURRENT APPLICATION NUMBER: US/10/667,022
CURRENT APPLICATION NUMBER: 2003-09-18
NUMBER OF SEQ ID NOS: 147
LENGTH: 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ö
                                                                                                                                                                                                                                                                                                                                                                                                                                    ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                          Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ;
                                                                                                                                                                                                                                                                                                                                                                                                                                          .
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Query Match 0.4%; Score 20; DB 1; Length 20; Best Local Similarity 100.0%; Pred. No. 2.6e+02; Matches 20; Conservative 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Query Match 0.4%; Score 20; DB 1; Length 20; Best Local Similarity 100.0%; Pred. No. 2.6e+02; Matches 20; Conservative 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                            Length 20;
                                                                                                                                                                                                                                                                                                                                                                                                                                       0; Indels
                                                                                                                                                                                                                                                                                                                                                                         Score 20; DB 1; L. Pred. No. 2.6e+02;
                                                                                                                                                                                                                                                                                                                                                            0.4%; bcc...
100.0%; Pred. No. ...
0; Mismatches
TITLE OF INVENTION: P150 EXPRESSION FILE REPERENCE: PTS-037 CURRENT APPLICATION NUMBER: US/10/667,022 CURRENT FILING DATE: 2003-09-18 NUMBER OF SEQ ID NOS: 147 SEQ ID NO 133 LENGTH: 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      3583 TCACTITITGCAACAIGITC 3602
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         3555 GAATCGAATTAGAGTCTCTG 3574
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1 rcaciriridcaacardic 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1 GAATCGAATTAGAGTCTCTG 20
                                                                                                                                                                                                                                                                                                                                                                                                             Best Local Similarity 100.
Matches 20; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TYPE: DNA ORGANISM: H. sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TYPE: DNA
ORGANISM: H. sapiens
                                                                                                                                                                                                                     TYPE: DNA
ORGANISM: H. sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    US-10-667-022-134
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 US-10-667-022-135
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 US-10-667-022-135
                                                                                                                                                                                                                                                                                                                       US-10-667-022-133
                                                                                                                                                                                                                                                                                                                                                                                   Query Match
                                                                                                                                                                                                                                                                                             FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      RESULT 396
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ઠ
```

```
Sequence 141, Application US/10667022

Faguence 141, Application US/10667022

Fublication No. US20040063657A1

GENERAL INFORMATION:
GENERAL INFORMATION:
TAPPLICANT: Kenneth W. Dobie
TITLE OF INVENTION: ANTISENSE MODULATION OF PHOSPHOINOSITIDE-3-KINASE, REGULATORY SUBITITLE OF INVENTION: PLSC EXPRESSION
FILE REFERENCE: RTS-0376
CURRENT APPLICATION NUMBER: US/10/667,022
CURRENT FILING DATE: 2003-09-18

NUMBER OF SEQ ID NOS: 147

SEQ ID NO 141

LENGTH: 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Sequence 142, Application US/10667022
Fublication No. US20040063657A1
GENERAL INFORMATION:
GENERAL INFORMATION:
TAPLICANT: Susan M. Freier
TITLE OF INVENTION: ANTISENSE MODULATION OF PHOSPHOINOSITIDE-3-KINASE, REGULATORY SUBILITIES REFERENCE: RTS-0376
CURRENT APPLICATION NUMBER: US/10/667,022
CURRENT FILING DATE: 2003-09-18
NUMBER OF SEQ ID NOS: 147
LENGTH: 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    US-10-667-022-143

Sequence 143, Application US/10667022

Sequence 143, Application US/1065702

Sequence 143, Application US/1065701

GENERAL INFORMATION:

APPLICANT: Susan M. Freier

APPLICANT: Kenneth W. Dobie

TITLE OF INVENTION: ANTISENSE MODULATION OF PHOSPHOINOSITIDE-3-KINASE, REGULATORY GUBI

TITLE OF INVENTION: P150 EXPRESSION

FILE REFERENCE: RTS-0376
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       0; Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    DB 1; Length 20;
2.6e+02;
hes 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Length 20;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           DB 1; Le 2.6e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Query Match

0.4%; Score 20; DB
Best Local Similarity 100.0%; Pred. No. 2.6
Matches 20; Conservative 0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Query Match 0.4%; Score 20; DB Best Local Similarity 100.0%; Pred. No. 2.6 Matches 20; Conservative 0; Mismatches
       4309 AGTCCTGCAGATGGAAATCC 4328
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  4397 ATGTTGTTGCAGGAAGTACT 4416
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  4424 CATCTGTGTCCTACTACAGG 4443
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ORGANISM: H. sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ORGANISM: H. sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           US-10-667-022-142
                                                                                                                                              US-10-667-022-141
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           US-10-667-022-142
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             US-10-667-022-141
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TYPE: DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   FEATURE
                                                ద
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ઠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           음
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               RESULT 402
US-10-667-022-140
; Sequence 140, Application US/10667022
; Publication W. US2040063657A1
; BENERAL INFORMATION:
; APPLICANT: Susan M. Freier
; APPLICANT: Susan M. Preier
; TITLE OF INVENTION: ANTISENSE MODULATION OF PHOSPHOINOSITIDE-3-KINASE, REGULATORY SUE
; TITLE OF INVENTION: P150 EXPRESSION
; TITLE OF INVENTION: P150 EXPRESSION
; FILE REFERENCE: RTS-0376
; CURRENT APPLICATION NUMBER: US/10/667,022
; CURRENT PILING DATE: 2003-09-18
; NUMBER OF SEQ ID NOS: 147
; SEQ ID NO 140
LENGTH: 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Sequence 139, Application US/10667022
Publication No. US20040063657A1
GENERAL INFORMATION:
GENERAL INFORMATION:
APPLICANT: Susan M. Freier
TITLE OF INVENTION: ANTISENSE MODULATION OF PHOSPHOINOSITIDE-3-KINASE, REGULATORY SUBTITLE OF INVENTION: PISO EXPRESSION
FILE REFERENCE: RTS-0376
CURRENT APPLICATION NUMBER: US/10/667,022
CURRENT PILING DATE: 2003-09-18
SEQ ID NO 139
                                                                                                                                                                                                                                                                                                             ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           0; Gaps
                                                                                                                                                                                                                                                                                                           ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ö
                                                                                                                                                                                                                                                        Query Match 0.4%; Score 20; DB 1; Length 20; Best Local Similarity 100.0%; Pred. No. 2.6e+02; Matches 20; Conservative 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ch 0.4%; Score 20; DB 1; Length 20; il Similarity 100.0%; Pred. No. 2.6e+02; 20; Conservative 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      0.4%; Score 20; DB 1; Length 20;
100.0%; Pred. No. 2.6e+02;
tive 0; Mismatches 0; Indels
FILE REFERENCE: RTS-0376
CURRENT APPLICATION NUMBER: US/10/667,022
CURRENT FILING DATE: 2003-09-18
NUMBER OF SEQ ID NOS: 147
SEQ ID NO 138
LENGTH: 20
                                                                                                                                                                                                                                                                                                                                                      4050 CAGTGGTACCATGGCTTGTT 4069
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    4166 TGATTGCAGCTGTTCAGGGC 4185
                                                                                                                                                                                                                                                                                                                                                                                   1 CAGTGGTACCATGGCTTGTT 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Query Match
Best Local Similarity 100.0
Matches 20; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Query Match
Best Local Similarity
Matches 20; Conserva
                                                                                                                                           TYPE: DNA
ORGANISM: H. sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TYPE: DNA
ORGANISM: H. sapiens
                                                                                                                                                                                                          US-10-667-022-138
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   RESULT 401
US-10-667-022-139
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             US-10-667-022-139
                                                                                                                                                                                       FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                               g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               음
                                                                                                                                                                                                                                                                                                                                                      ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ઠે
```

셤 à

```
Sequence 146, Application US/10667022

Publication No. US2004063657A1

GENERAL INFORMATION:
GENERAL INFORMATION:
APPLICANT: Stear M. Freier
APPLICANT: Kenneth W. Dobie
TITLE OF INVENTION: ANTISENSE MODULATION OF PHOSPHOINOSITIDE-3-KINASE, REGULATORY SUBLITILE OF INVENTION: P150 EXPRESSION
FILE REFERENCE: RTS-0376
CURRENT APPLICATION NUMBER: US/10/667,022
CURRENT APPLICATION NUMBER: US/10/667,022
CURRENT PILING DATE: 2003-09-18
NUMBER OF SEQ ID NOS: 147

SEQ ID NO 146
LENGTH: 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   US-10-667-022-147

Sequence 147, Application US/10667022

Sequence 147, Application US/10667022

Publication No. US20040063657A1

GENERAL INFORMATION:

APPLICANT: Susan M. Freier

APPLICANT: Kenneth W. Dobie

TITLE OF INVENTION: PLSO EXPRESSION

FILE REFERENCE: RTS-0376

CURRENT APPLICATION UNMBER: US/10/667,022

CURRENT FILING DATE: 2003-09-18

NUMBER OF SEQ ID NOS: 147

TANCHUL.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              .
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Sequence 12, Application US/10661415
Publication No. US20040229828A1
GENERAL INFORMATION:
APPLICANT: VAILLANT, ANDREW
TITLE OF INVENTION: ANTIVIRAL OLIGONUCLEOTIDES TARGETING RSV
FILE REFERENCE: 029849/0205
CURRENT APPLICATION NUMBER: US/10/661,415
CURRENT FILING DATE: 2003-09-12
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        0.4%; Score 20; DB 1; Length 20;
100.0%; Pred. No. 2.6e+02;
rative 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Length 20;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          0.4%; Score 20; DB 1; Le
100.0%; Pred. No. 2.6e+02;
iive 0; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            4823 CTTATGCATCTCTTTGCAAG 4842
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        4792 CAAAATGGTTAAGATGTACT 4811
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1 crrarccarcrirriccase 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1 CAAAATGGTTAAGATGTACT 20
1 CTGACTAAATGACACCCAAA 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Query Match
Best Local Similarity 100.0
Matches 20, Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Query Match 0.45
Best Local Similarity 100.0
Matches 20; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TYPE: DNA
ORGANISM: H. sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ORGANISM: H. sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    US-10-667-022-146
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        US-10-667-022-147
                                                                                                                     US-10-667-022-146
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    US-10-661-415-12
                                                                                                                                                                                                                                                                                                                                                                                                                                                   TYPE: DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Best Loca.
Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            RESULT 410
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ઠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Š
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            셤
                                 셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Sequence 144, Application US/10667022

Publication No. US20040063657A1

GENERAL INFORMATION:
GENERAL INFORMATION:
APPLICANT: Kenneth W. Dobie
TITLE OF INVENTION: ANTISENSE MODULATION OF PHOSPHOINOSITIDE-3-KINASE, REGULATORY SUBTITLE OF INVENTION: APPLICANT:
TITLE OF INVENTION: ANTISENSE MODULATION OF PHOSPHOINOSITIDE-3-KINASE, REGULATORY SUBTITLE REPRENCE: RTS-0376
CURRENT APPLICATION NUMBER: US/10/667,022
CURRENT PILING DATE: 2003-09-18

NUMBER OF SEQ ID NOS: 147

SEQ ID NO 144
LENGTH: 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      APPLICANT: Susan M. Freier
APPLICANT: Susan M. Preier
APPLICANT: Susan M. Preier
APPLICANT: Senneth W. Dobie
TITLE OF INVENTION: ANTISENSE MODULATION OF PHOSPHOINOSITIDE-3-KINASE, REGULATORY SUB-
TITLE OF INVENTION: P150 EXPRESSION
FILE REFERENCE: RTS-0376
CURRENT APPLICATION NUMBER: US/10/667,022
CURRENT APPLICATION NUMBER: US/10/667,022
CURRENT FILING DATE: 2003-09-18
NUMBER OF SEQ ID NOS: 147
SEQ ID NO 145
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ö
                                                                                                                                                                                                                                                                                        ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Gaps
                                                                                                                                                                                                                                                                                          Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ö
                                                                                                                                                                                                                                                                                        ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Query Match

0.4%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 2.6e+02;
Matches 20; Conservative 0; Mismatches 0; Indels
                                                                                                                                                                                                                                          Query Match 0.4%; Score 20; DB 1; Length 20; Best Local Similarity 100.0%; Pred. No. 2.6e+02; Matches 20; Conservative 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Length 20;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 0.4%; Score 20; DB 1; Lt
ilarity 100.0%; Pred. No. 2.6e+02;
Conservative 0; Mismatches 0;
           CURRENT APPLICATION NUMBER: US/10/667,022 CURRENT FILING DATE: 2003-09-18 NUMBER OF SEQ ID NOS: 147 SEQ ID NO 143
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  US-10-667-022-145
; Sequence 145, Application US/10667022
; Publication No. US20040063657A1
; GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              4761 CTGTTTCATGACTGAC 4780
                                                                                                                                                                                                                                                                                                                                        4633 GIGIGGAATAAAACCTACT 4652
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1 CTGTTTCATGACTGACTGAC 20
                                                                                                                                                                                                                                                                                                                                                                    GIGIGGAAAIAAAACCIACI 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Query Match
Best Local Similarity
Matches 20; Conserva
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TYPE: DNA
ORGANISM: H. sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TYPE: DNA
ORGANISM: H. sapiens
                                                                                                                                 TYPE: DNA
ORGANISM: H. sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               US-10-667-022-145
                                                                                                                                                                                                                                                                                                                                                                                                                                                        RESULT 406
US-10-667-022-144
                                                                                                                                                                              FEATURE:
US-10-667-022-143
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ; FEATURE:
US-10-667-022-144
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      LENGTH: 20
                                                                                                           LENGTH:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       d
```

4776 CTGACTAAATGACACCCAAA 4795

ઠે

```
FILE REFERENCE: C1037/7013 (HCL/MAT)
CURRENT APPLICATION NUMBER: US/10/831,778
CURRENT FILING DATE: 2004-04-23
FRIOR APPLICATION NUMBER: US 60/179,991
FRIOR FILING DATE: 2000-02-03
NUMBER OF SEQ ID NOS: 1093
SOFTWARE: PastSEQ for Windows Version 3.0
SEQ ID NO 226
LENGTH: 20
                                                                                                                                                                                                                                         TYPE: DNA ORGANISM: Artificial Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     US-10-831-778-556/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   US-10-831-778-560
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ઠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Gaps
                                                                                                                                                                                                                                                                                                                                    OTHER INFORMATION: Description of Artificial Sequence: Synthetic COTHER INFORMATION: oligonucleotide US-10-661-415-12
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              OTHER INFORMATION: Description of Artificial Sequence: Synthetic OTHER INFORMATION: oligonucleotide
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           .
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Sequence 15, Application US/10661415
; Publication No. US20040229828A1
; GENERAL INFORMATION:
GENERAL INFORMATION:
APPLICANT: VAILLANT, ANDREW
JAPLICANT: VAILLANT, ANDREW
JAPLICANT: VAILLANT, ANDREW
JAPLICANT: VAILLANT, ANDREW
JELLE REPERENCE: 029849/0205
; CURRENT APPLICATION NUMBER: US/10/661,415
; CURRENT FILING DATE: 2003-09-12
; PRIOR PELLING DATE: 2003-09-11
; PRIOR PILING DATE: 2003-09-11
; PRIOR PILING DATE: 2003-09-13
; NUMBER OF SEQ ID NOS: 36
; SOFTWARE PRELING DAS: 36
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                RESULT 412
US-10-831-778-226/c
US-10-831-778-226/c
; Sequence 226, Application US/10831778
; Publication No. US20040235774A1
; GENERAL INFORMATION:
; APPLICANT: Bratzler, Robert L.;
; APPLICANT: Petersen, Deanna M.;
; APPLICANT: Fouron, Yves
; TITLE OF INVENTION: Immunostimulatory Nucleic Acids for the
; TITLE OF INVENTION: Ireatment of Asthma and Allergy
                                                                                                                                                                                                                                                                                                                                                                                                                                         Query Match

0.4%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 2.6e+02;
Matches 20; Conservative 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Query Match 0.4%; Score 20; DB 1; Length 20; Best Local Similarity 100.0%; Pred. No. 2.6e+02; Matches 20; Conservative 0; Mismatches 0; Indels
PRIOR APPLICATION NUMBER: PCT/IB03/04573
PRIOR FILING DATE: 2003-09-11
PRIOR PLLING DATE: 2003-09-11
PRIOR PILING DATE: 2002-12-05
PRIOR PILING DATE: 2002-12-05
PRIOR APPLICATION NUMBER: 60/410,264
NUMBER OF SEQ ID NOS: 36
SOFTWARE: Patentin Ver. 3.2
LENGTH: 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              5025 AAAAAAAAAAAAAAA 5044
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        5025 AAAAAAAAAAAAAAA 5044
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1 AAAAAAAAAAAAAAAA 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        20 AAAAAAAAAAAAAAA 1
                                                                                                                                                                                                                                                            TYPE: DNA
ORGANISM: Artificial Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ORGANISM: Artificial Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        RESULT 411
US-10-661-415-15/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 SEQ ID NO 15
LENGTH: 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TYPE: DNA
                                                                                                                                                                                                                                                                                                                 FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     g
```

```
ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Gaps
                                                                                                                                                                 Gape
                                                                                                                                                                 ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ö
                                                                                                                                                                                                                                                                                                                                                                              Sequence 556, Application US/10831778
; Sequence 556, Application US/10831778
; Publication No. US20040235774A1
; GENERAL INFORMATION:
; APPLICANT: Bratzler, Robert L.
; APPLICANT: Petersen, Deanna M.
; APPLICANT: Petersen, Deanna M.
; TILLE OF INVENTION: Immunostimulatory Nucleic Acids for the
; TILLE OF INVENTION: Immunostimulatory Nucleic Acids for the
; TILLE OF INVENTION: Treatment of Asthma and Allergy
; FILE REFERENCE: C1037/7013 (HCL/MAT)
; CURRENT APPLICATION NUMBER: US/10/831,778
; CURRENT FILING DATE: 2000-02-03
; NUMBER OF SEQ ID NOS: 1093
; SOFTWARE: FastSEQ for Windows Version 3.0
; SEQ ID NO 556
; LENGTH: 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sequence 560, Application US/10811778

Publication No. US20040235774A1

GENERAL INFORMATION:

APPLICANT: Bratzler, Robert L.

APPLICANT: Petersen, Deanna M.

TITLE OF INVENTION: Immunostimulatory Nucleic Acids for the TITLE OF INVENTION: Treatment of Asthma and Allergy FILE REFERENCE: C1037/7013 (HCL/MAT)

CURRENT APPLICATION NUMBER: US/10/831,778

CURRENT FILING DATE: 2004-04-23

PRIOR PELING DATE: 2000-02-03
                                                                                                                Length 20;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Length 20;
                                                                                                                                                              0; Indels
                                                                                                             DB 1; Le
2.6e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                0.4%; Score 20; DB 1; L. 100.0%; Pred. No. 2.6e+02; tive 0; Mismatches 0;
                                                                                                       Query Match 0.4%; Score 20; DB Best Local Similarity 100.0%; Pred. No. 2.6 Matches 20; Conservative 0; Mismatches
FEATURE:

, OTHER INFORMATION: Synthetic Sequence

US-10-831-778-226
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ) OTHER INFORMATION: Synthetic Sequence US-10-831-778-556
                                                                                                                                                                                                                  5025 AAAAAAAAAAAAAAAAA 5044
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        5025 AAAAAAAAAAAAAAAAA 5044
                                                                                                                                                                                                                                                                   20 AAAAAAAAAAAAAAAA 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         20 AAAAAAAAAAAAAAAA 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TYPE: DNA
ORGANISM: Artificial Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Best Local Similarity 100.0
Matches 20; Conservative
```

```
NAME/KEY: modified_base
LOCATION: (15)
OTHER INFORMATION: LNA monomer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 NAME/KEY: modified_base
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      NAME/KEY: modified_base
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      NAME/KEY: modified_base LOCATION: (3)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      NAME/KEY: modified_base
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      NAME/KEY: modified_base
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   FEATURE:
NAME/KEY: modified_base
                                                                                                                                                                                                                                                                                                                                ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ö
                                                                                                                                                                                                                                                                                                          ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Sequence 1, Application US/10601140A
Publication No. US20050053942A1
GENERAL INFORMATION:
GENERAL INFORMATION:
APPLICANT: KAUPPINEN, SAKARI
APPLICANT: JACOBSEN, NANA
TITLE OF INVENTION: METHODS AND SYSTEMS FOR DETECTION AND ISOLATION OF A
TITLE OF INVENTION: MCLEOTIDE SEQUENCE
FILE REFERENCE: 57764 (71994)
CURRENT APPLICATION NUMBER: US/10/601,140A
CURRENT PILING DATE: 2003-06-20
PRIOR APPLICATION NUMBER: US 60/390,928
PRIOR FILING DATE: 2002-06-24
NUMBER OF SEQ ID NOS: 45
SOFTWARE: PATENTIN Ver. 3.2
                                                                                                                                                                                                                                                                                                          Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ;
0
                                                                                                                                                                                                                                                                                                          ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     RESULT 415

US-10-728-078-23/C

Sequence 23, Application US/10728078

Publication No. US20050038229A1

GENERAL INFORMATION:

APPLICANT: Hipovsek, Dasa

APPLICANT: Kuimelis, Robert G

TITLE OF INVENTION: AND OTHER BINDING PROTEINS

TITLE OF INVENTION: AND OTHER BINDING PROTEINS

FILE REFERENCE: 50036/021004

CURRENT APPLICATION NUMBER: US/10/728,078

PRIOR APPLICATION NUMBER: US 60/111,737

PRIOR APPLICATION NUMBER: US 60/111,737

PRIOR FILING DATE: 1998-12-10

PRIOR APPLICATION NUMBER: US 60/111,737

PRIOR APPLICATION NUMBER: US 60/111,737

PRIOR APPLICATION NUMBER: US 09/456,693

PRIOR PRILING DATE: 1999-12-09

PRIOR PRILING DATE: 1999-12-09

PRIOR PRILING DATE: 1999-12-09

PRIOR PRILING DATE: 1999-12-09

PRIOR PRILING DATE: 2000-02-29

NUMBER OF SEQ ID NOS: 202

SEQ ID NOS: 202

LENGTH. 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Query Match 0.4%; Score 20; DB 1; Length 20; Best Local Similarity 100.0%; Pred. No. 2.6e+02; Matches 20; Conservative 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                        Query Match 0.4%; Score 20; DB 1; Length 20; Best Local Similarity 100.0%; Pred. No. 2.6e+02; Matches 20; Conservative 0; Mismatches 0; Indels
NUMBER OF SEQ ID NOS: 1093
SOFTWARE: FastSEQ for Windows Version 3.0
SEQ ID NO 560
LENGTH: 20
                                                                                                                                                                                  ; OTHER INFORMATION: Synthetic Sequence US-10-831-778-560
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           5025 AAAAAAAAAAAAAAAA 5044
                                                                                                                                                                                                                                                                                                                                                                5025 AAAAAAAAAAAAAAAA 5044
                                                                                                                                                                                                                                                                                                                                                                                                20 AAAAAAAAAAAAAAAAAAA 1
                                                                                                             TYPE: DNA
ORGANISM: Artificial Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TYPE: DNA ORGANISM: Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           RESULT 416
US-10-601-140A-1/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           US-10-728-078-23
                                                                                                                                                             FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                8
                                                                                                                                                                                                                                                                                                                                                                                                                     셤
                                                                                                                                                                                                                                                                                                                                                                        ઠ
```

```
US-10-601-140A-2/C

is Sequence 2, Application US/10601140A

is GENERAL INFORMATION:
is GENERAL INFORMATION:
is APPLICANT: KAUPRINEN, NARA

it TILE OF INVENTION: MCTHORIDE SEQUENCE
it REPERENCE: 57764 (71994)

CURRENT FILING DATE: 2003-66-20

PRIOR FILING DATE: 2003-06-24

is PRIOR FILING DATE: 2002-06-24

is SOFTWARE: Patentin Ver. 3.2

is ENTHE.
                                                                                                                                                                                                                        ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                FEATURE: OTHER INFORMATION: Description of Artificial Sequence: Synthetic OTHER INFORMATION: oligonucleotide
                                                                              OTHER INFORMATION: Description of Artificial Sequence: Synthetic; OTHER INFORMATION: oligonucleotide
US-10-601-140A-1
                                                                                                                                                                                                                            ö
                                                                                                                                                                              Query Match
0.4%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 2.6e+02;
Matches 20; Conservative 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                     5025 AAAAAAAAAAAAAAAA 5044
                                                                                                                                                                                                                                                                                                               20 AAAAAAAAAAAAAAAAAAA 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          LOCATION: (11)
OTHER INFORMATION: LNA monomer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          LOCATION: (13)
OTHER INFORMATION: LNA monomer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             LOCATION: (1)
OTHER INFORMATION: LNA monomer
FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  NAME/KEY: modified_base
LOCATION: (5)
OTHER INFORMATION: LNA monomer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          LOCATION: (7)
OTHER INFORMATION: LNA monomer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           LOCATION: (9)
OTHER INFORMATION: LNA monomer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          OTHER INFORMATION: LNA monomer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TYPE: DNA ORGANISM: Artificial Sequence
SEQ ID NO 1
LENGTH: 20
TYPE: DNA
ORGANISM: Artificial Sequence
FEATURE:
```

ઠ

```
US-10-601-140A-6/c

| Sequence 6, Application US/10601140A |
| Sequence 6, Application No. US20050053942A1 |
| Sequence 6, Application No. US20050053942A1 |
| GENERAL INFORMATION |
| APPLICANT: KAUPPINEN, SAKARI |
| APPLICANT: JACOBERN, NANA |
| TITLE OF INVENTION: NUCLECTIDE SEQUENCE |
| FILE REPRERENCE: 5776/4/11994 |
| CURRENT APPLICATION NUMBER: US/10/601,140A |
| CURRENT PILING DATE: 2003-06-20 |
| PRIOR FILING DATE: 2003-06-24 |
| NUMBER OF SEQ ID NOS: 45 |
| SOGTWARE: PatentIn Ver. 3.2 |
| LENGTH: 20
                         OTHER INFORMATION: Description of Artificial Sequence: Synthetic OTHER INFORMATION: oligonucleotide
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      OTHER INFORMATION: Description of Artificial Sequence: Synthetic OTHER INFORMATION: oligonucleotide
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Query Match 0.4%; Score 20; DB 1; Length 20; Best Local Similarity 100.0%; Pred. No. 2.6e+02; Matches 20; Conservative 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                5025 AAAAAAAAAAAAAAAAA 5044
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             20 AAAAAAAAAAAAAAA 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 FEATURE:
NAME/KEY: modified_base
LOCATION: (13)
OTHER INFORMATION: LINA MONOMER
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             NAME/KEY: modified_base
LOCATION: (7)
OTHER INFORMATION: LNA monomer
                                                                                             NAME/KEY: modified_base
LOCATION: (1)
OTHER INFORMATION: LNA monomer
                                                                                                                                                                                                                                                                                                                                                                                         NAME/KEY: modified_base
LOCATION: (10)
OTHER INFORMATION: LNA monomer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               LOCATION: (16)
OTHER INFORMATION: LNA monomer
                                                                                                                                                                                                                  LOCATION: (4)
OTHER INFORMATION: LNA monomer
                                                                                                                                                                                                                                                                                                                                            OTHER INFORMATION: LNA monomer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               LOCATION: (19)
OTHER INFORMATION: LNA monomer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               OTHER INFORMATION: LNA monomer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ORGANISM: Artificial Sequence FEATURE:
                                                                                                                                                                  FEATURE:
NAME/KEY: modified_base
                                                                                                                                                                                                                                                                                         NAME/KEY: modified base
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             NAME/KEY: modified_base
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        FEATURE:
NAME/KEY: modified_base
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           NAME/KEY: modified_base
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  US-10-601-140A-4
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TYPE: DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           LOCATION:
                                                                                                                                                                                                                                                                                                                        LOCATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Sequence 3, Application US/10601140A
| Publication No. US20050053942A1
| GENERAL INFORMATION:
| APPLICANT: KAUPPINEN, SAKARI
| APPLICANT: KAUPPINEN, SAKARI
| APPLICANT: JACOBSEN, NANA
| TITLE OF INVENTION: METHODS AND SYSTEMS FOR DETECTION AND ISOLATION OF A
| TITLE OF INVENTION: NUCLEOTION SEQUENCE
| FILE REFERENCE: 57764(71994)
| CURRENT PILING DATE: 2003-06-20
| FRIOR APPLICATION NUMBER: US 60/390,928
| FRIOR APPLICATION NUMBER: US 60/390,928
| KROR FILING DATE: 2002-06-24
| NUMBER OF SEQ ID NOS: 45
| SEQ ID NOS: 45
| SEQ ID NO S: 45
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Sequence 4, Application US/10601140A
| Publication No. US20050053942A1
| GENERAL INFORMATION:
| APPLICANT: RAUPPINEN, SAKARI
| APPLICANT: TAUPPINEN, SAKARI
| APPLICANT: JACOBSEN, NANA
| TITLE OF INVENTION: WETHODS AND SYSTEMS FOR DETECTION AND ISOLATION OF A
| TITLE OF INVENTION: UNCLEOTIDE SEQUENCE
| FILE REFERENCE: 57764(71994)
| CURRENT PILING DATE: 2003-06-20
| PRIOR APPLICATION NUMBER: US 60/390,928
| PRIOR PILING DATE: 2002-06-24
| NUMBER OF SEQ ID NOS: 45
| SEQ ID NO S: 45
| SEQ ID NO S: 45
| SEQ ID NO S: 40
                                                                                                                                                                                                                                                                                              ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ö
                                                                                                                                                                                                                                                                                              Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           FEATURE:
OTHER INFORMATION: Description of Artificial Sequence: Synthetic
INFORMATION: oligonucleotide
US-10-601-140A-3
                                                                                                                                                                                                                                                                                              ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Query Match 0.4%; Score 20; DB 1; Length 20; Best Local Similarity 100.0%; Pred. No. 2.6e+02; Matches 20; Conservative 0; Mismatches 0; Indels
                                                                                                                                                                                                                                           Score 20; DB 1; Length 20;
Pred. No. 2.6e+02;
                                                                                                                                                                                                                                                                                            0; Indels
                                                                                                                                                                                                                                      Query Match 0.4%; Score 20; DB Best Local Similarity 100.0%; Pred. No. 2.6 Matches 20; Conservative 0; Mismatches
                                                                                                                                                                                                                                                                                                                                         5025 AAAAAAAAAAAAAAAAA 5044
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   5025 AAAAAAAAAAAAAAAA 5044
                                                                                                                                                                                                                                                                                                                                                                                       20 AAAAAAAAAAAAAAAAA 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   20 AAAAAAAAAAAAAAAAA 1
                                                               OTHER INFORMATION: LNA monomer
                                                                                           FEATURE:
NAME/KEY: modified_base
LOCATION: (19)
OTHER INFORMATION: LNA monomer
US-10-601-140A-2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ORGANISM: Artificial Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TYPE: DNA ORGANISM: Artificial Sequence
                    NAME/KEY: modified_base
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 RESULT 418
US-10-601-140A-3/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          RESULT 419
US-10-601-140A-4/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TYPE: DNA
                                                  LOCATION:
FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                    g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     8
```

Gaps

```
Sequence 8, Application US/10601140A

Sequence 8, Application US/10601140A

Publication No. US20050053942A1

GENERAL INFORMATION:

APPLICANT: GAOPPINEN, SAKARI

APPLICANT: JACOBSEN, NANA

TITLE OF INVENTION: METHODS AND SYSTEMS FOR DETECTION AND ISOLATION OF A

TITLE OF INVENTION: METHODS AND SYSTEMS FOR DETECTION OF A

TITLE OF INVENTION: METHODS AND SYSTEMS FOR DETECTION OF A

TITLE OF INVENTION: MOUGHER: US/10/601,140A

CURRENT PILIAG DATE: 2003-06-20

PRIOR PAPLICATION NUMBER: US 60/390,928

PRIOR FILING DATE: 2002-06-24

NUMBER OF SEQ ID NOS: 45

SOFTWARE: Patentin Ver. 3.2

SEQ ID NO 8

LENGTH: 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Sequence 9, Application US/10601140A;
Sequence 9, Application US/20650053942A1

Publication No. US20550053942A1

GENERAL INFORMATION:
APPLICANT: MACDELEN
TITLE OF INVENTION: METHODS AND SYSTEMS FOR DETECTION AND ISOLATION OF A
TITLE OF INVENTION: METHODS AND SYSTEMS FOR DETECTION OF A
TITLE OF INVENTION: MUCLECTIDE SEQUENCE
FILE REPREBNCE: 57054 (71994)
CURRENT FILING DATE: 2003-06-20
FRICK APPLICATION NUMBER: US 60/390,928
PRIOR PALLICATION NUMBER: US 60/390,928
NUMBER OF SEQ ID NOS: 45
SOFTWARE: Patentin Ver. 3.2
SEQ ID NO 9
LENGTH: 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                  TYPE: DNA ORGANISM: Artificial Sequence ORGANISM: Artificial Sequence FRATURE: OTHER INFORMATION: Description of Artificial Sequence: Synthetic OTHER INFORMATION: oligonucleotide
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       OTHER INFORMATION: Description of Artificial Sequence: Synthetic OTHER INFORMATION: oligonucleotide
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             0.4%; Score 20; DB 1; Length 20; 100.0%; Pred. No. 2.6e+02; tive 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      5025 AAAAAAAAAAAAAAAAAA 5044
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  20 AAAAAAAAAAAAAAA 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  FEATURE:
NAME/KEY: modified base
LOCATION: (1)..(20)
OTHER INFORMATION: LNA monomer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        FEATURE:
NAME/KRY: modified base
LOCATION: (3). (4)
OTHER INFORMATION: LNA monomer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             LOCATION: (8)..(9) -
OTHER INFORMATION: LNA monomer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 NAME/KEY: modified base
LOCATION: (13)...(14)
OTHER INFORMATION: LNA monomer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TYPE: DNA ORGANISM: Artificial Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Best Local Similarity 100.0
Matches 20; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      NAME/KEY: modified_base
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     US-10-601-140A-9/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   US-10-601-140A-8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      GENERAL INFORMATION:

APPLICANT: JACOBSEN, NAVA

TITLE OF INVENTION: METHODS AND SYSTEMS FOR DETECTION AND ISOLATION OF A

TITLE OF INVENTION: METHODS AND SYSTEMS FOR DETECTION OF A

TITLE OF INVENTION: MUCLECTIDE SEQUENCE

FILE REFERENCE: 57764(71994)

CURRENT APPLICATION NUMBER: US/10/601,140A

CURRENT APPLICATION NUMBER: US 60/390,928

PRIOR PRILING DATE: 2002-06-20

PRIOR FILING DATE: 2002-06-24

NUMBER OF SEQ ID NOS: 45

SEQ ID NO 7

SEQ ID NO 7

TENCHT: 20
                                                                                                                                                                                                                                                                                                                                                                              ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Gaps
                                                                                                                                                                                                                                                                                                                                                                              Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   OTHER INFORMATION: Description of Artificial Sequence: Synthetic OTHER INFORMATION: oligonucleotide
                                                                                                                                                                                                                                                                                                                                                                              ;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Query Match 0.4%; Score 20; DB 1; Length 20; Best Local Similarity 100.0%; Pred. No. 2.6e+02; Matches 20; Conservative 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                         Length 20;
                                                                                                                                                                                                                                                                                                                                                                           0; Indels
                                                                                                                                                                                                                                                                                                                       Query Match 0.4%; Score 20; DB 1; Le
Best Local Similarity 100.0%; Pred. No. 2.6e+02;
Matches 20; Conservative 0; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          5025 AAAAAAAAAAAAAAAA 5044
                                                                                                                                                                                                                                                                                                                                                                                                                               5025 AAAAAAAAAAAAAAAAA 5044
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Sequence 7, Application US/10601140A Publication No. US20050053942A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            20 AAAAAAAAAAAAAAAA 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         20 AAAAAAAAAAAAAAAA 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              , LUCATION: (19)
; OTHER INFORMATION: LNA monomer US-10-601-140A-7
                                                                   FEATURE:
NAME/KEY: modified_base
LOCATION: (15)
OTHER INFORMATION: LNA monomer
                                                                                                                                                                                                                           ; LOCATION: (19)
; OTHER INFORMATION: LNA monomer US-10-601-140A-6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       NAME/KEY: modified base
LOCATION: (4)
OTHER INFORMATION: LNA monomer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    LOCATION: (9)
OTHER INFORMATION: LNA monomer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               OTHER INFORMATION: LNA monomer
                                                 THER INFORMATION: LNA monomer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TYPE: DNA
ORGANISM: Artificial Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           NAME/KEY: modified_base
LOCATION: (14)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            NAME/KEY: modified_base LOCATION: (19)
                                                                                                                                                                         FEATURE:
NAME/KEY: modified_base
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          NAME/KEY: modified base
  modified base
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               US-10-601-140A-7/C
NAME/KEY:
LOCATION:
                                                                                                                                                                                                                                                                                                                                                                                                                               ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            g
```

ö

```
LOCATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        LOCATION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        RESULT 426
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  g
                                                                                                                                                                                                                                                                                                                                                     WS-10-601-140A-10/C

Sequence 10, Application US/10601140A

Publication No. US20050053942A1

GENERAL INFORMATION:
APPLICANT: KAUPPINEN, SAKARI
APPLICANT: AACOBSEN, NANA
TITLE OF INVENTION: NETHODS AND SYSTEMS FOR DETECTION AND ISOLATION OF A
TITLE OF INVENTION: NUCLEOTIDE SEQUENCE
FILE REFERENCE: 57764 (71994)
CURRENT APPLICATION NUMBER: US/10/601,140A
CURRENT FILING DATE: 2003-06-20
PRIOR FILING DATE: 2002-06-24
NUMBER OF SEQ ID NOS: 45
SOFTWARE: Patentin Ver. 3.2
SEQ ID NO 10
LENGTH: 20
                                                                                                                                                                                     ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             RESULT 425
US-10-601-140A-23/C
iSequence 23, Application US/10601140A
Sequence 23, Application US/206013942A1
GENERAL INFORMATION:
GENERAL INFORMATION:
APPLICANT: AAUDENINEN, SAKARI
TITLE OF INVENTION: METHODS AND SYSTEMS FOR DETECTION AND ISOLATION OF A
TITLE OF INVENTION: MUCLEOTIDE SEQUENCE
FILE REFERENCE: 57764 (71994)
CURRENT APPLICATION NUMBER: US/10/601,140A
CURRENT FILING DATE: 2003-06-20
                                                                                                                                                                                     Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                OTHER INFORMATION: Description of Artificial Sequence: Synthetic OTHER INFORMATION: oligonucleotide
                                                                                                                                                                                     .
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ö
                                                                                                                                      Score 20; DB 1; Length 20;
Pred. No. 2.6e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Length 20;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 DB 1; Le
2.6e+02;
                                                                                                                                  Query Match 0.4%; Score 20; DB Best Local Similarity 100.0%; Pred. No. 2.6 Matches 20; Conservative 0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Query Match

0.4%; Score 20; DB
Best Local Similarity 100.0%; Pred. No. 2.6
Matches 20; Conservative 0; Mismatches
                                                                                                                                                                                                                            5025 AAAAAAAAAAAAAAAA 5044
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       5025 AAAAAAAAAAAAAAAAAA 5044
                                                                                                                                                                                                                                                                    20 AAAAAAAAAAAAAAA 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 20 AAAAAAAAAAAAAAA 1
; PEATURE:
; NAME/KEY: modified base
; LOCATION: (18)..(1<u>9</u>)
; OTHER INFORMATION: LNA monomer
US-10-601-140A-9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  FEATURE:
NAME/KEY: modified base
LOCATION: (10)..(12)
OTHER INFORWATION: LNA monomer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            FEATURE:
NAME/KRY: modified base
LOCATION: (3)..(5)
OTHER INFORMATION: LNA monomer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             NAME/KEY: modified base CCATION: (17)...(15) CTHER INFORMATION: LNA monomer US-10-601-140A-10
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TYPE: DNA
ORGANISM: Artificial Sequence
                                                                                                                                                                                                                            ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ò
```

```
WS-10-611-140A-34

Sequence 34, Application US/10601140A

Sequence 34, Application US/10601140A

Publication No. US20050053942A1

GENERAL INFORMATION:

APPLICANT: CAUPPINEN, SAKARI

APPLICANT: JACOBSEN, MANA

TITLE OF INVENTION: MUCLECIDE SEQUENCE

FILE REFERENCE: 57764(71994)

CURRENT FILING DATE: 2003-06-20

PRIOR APPLICATION NUMBER: US/10/601,140A

CURRENT FILING DATE: 2003-06-24

PRIOR FILING DATE: 2002-06-24
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Gaps
                                                                                                                                                                                                                             OTHER INFORMATION: Description of Artificial Sequence: Synthetic OTHER INFORMATION: oligonucleotide capture probe
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Query Match 0.4%; Score 20; DB 1; Length 20; Best Local Similarity 100.0%; Pred. No. 2.6e+02; Matches 20; Conservative 0; Mismatches 0; Indels
PRIOR APPLICATION NUMBER: US 60/390,928
PRIOR FILING DATE: 2002-06-24
NUMBER OF SEQ ID NOS: 45
SOFTWARE: Patentin Ver. 3.2
SEQ ID NO 23
LENGTH: 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 5025 AAAAAAAAAAAAAAAAAA 5044
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 20 AAAAAAAAAAAAAAAA 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  NAME/KEY: modified_base
LOCATION: (11)
OTHER INFORMATION: LNA monomer
                                                                                                                                                                                                                                                                                                                                                                                                      NAME/KEY: modified_base
LOCATION: (3)
OTHER INFORMATION: LNA monomer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ; LOCATION: (19) _
; OTHER INFORMATION: LNA monomer
US-10-601-140A-23
                                                                                                                                                                                                                                                                                                                                                         OTHER INFORMATION: LNA monomer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 OTHER INFORMATION: LNA monomer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        OTHER INFORMATION: LNA monomer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                LOCATION: (15)
OTHER INFORMATION: LNA monomer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               OTHER INFORMATION: LNA monomer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       LOCATION: (17)
OTHER INFORMATION: LNA monomer
                                                                                                                                                      TYPE: DNA ORGANISM: Artificial Sequence
                                                                                                                                                                                                                                                                                                    NAME/KEY: modified_base
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                NAME/KEY: modified_base
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               NAME/KEY: modified_base LOCATION: (19)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             NAME/KEY: modified_base
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    NAME/KEY: modified_base
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         NAME/KEY: modified_base
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                NAME/KEY: modified base
```

ö

```
JS-10-876-086-49/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               g
                                                                                                                                                       ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          RESULT 428

US-10-601-140A-44

i Sequence 44, Application US/10601140A

i Publication No. US20050033942A1

i GENERAL INFORMATION:

APPLICANT: AACUPINEN:

APPLICANT: AACUPINEN:

TITLE OF INVENTION: METHODS AND SYSTEMS FOR DETECTION AND ISOLATION OF A

TITLE OF INVENTION: NUCLEARINE SEQUENCE

TITLE OF INVENTION: NUCLEARINE SEQUENCE

TITLE OF INVENTION: NUCLEARINE SEQUENCE

TITLE OF INVENTION: US-10601,140A

CURRENT APPLICATION NUMBER: US 60/390,928

PRIOR PELICATION NUMBER: US 60/390,928

NUMBER OF SEQ ID NOS: 45

SOFTWARE: PatentIn Ver. 3.2

SERVID NO 44

LENGTH: 20
                                                                                                                                                                                                                                                                                                                                                ö
                                                                                                                                                                                                            ô
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Gaps
                                                                                                                                                                                                            Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CTHER INFORMATION: Description of Artificial Sequence: Synthetic CTHER INFORMATION: oligonucleotide US-10-601-140A-40
                                                                                                     OTHER INFORMATION: Description of Artificial Sequence: Synthetic OTHER INFORMATION: oligonucleotide linker
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ö
                                                                                                                                                                                                            .
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Length 20;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     0, Indels
                                                                                                                                                                           Length 20;
                                                                                                                                                                                                            Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   0.4%; Score 20; DB 1; Le
100.0%; Pred. No. 2.6e+02;
tive 0; Mismatches 0;
                                                                                                                                                                        Query Match
0.4%; Score 20; DB 1; L
Best Local Similarity 100.0%; Pred. No. 2.6e+02;
Matches 20; Conservative 0; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           5025 AAAAAAAAAAAAAAAAA 5044
                                                                                                                                                                                                                                              5025 AAAAAAAAAAAAAAAAA 5044
                                                                                                                                                                                                                                                                               1 AAAAAAAAAAAAAAA 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           20 AAAAAAAAAAAAAAAA 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TYPE: RNA
ORGANISM: Artificial Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TYPE: DNA
ORGANISM: Artificial Sequence
                                                                        ORGANISM: Artificial Sequence
SOFTWARE: Patentin Ver. 3.2
SEQ ID NO 34
LENGTH: 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Local Similarity 100.
nes 20; Conservative
                                                                                                                                            US-10-601-140A-34
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                SEQ ID NO 40
LENGTH: 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Query Match
                                                         TYPE: DNA
                                                                                          FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Matches
                                                                                                                                                                                                                                                                               셤
                                                                                                                                                                                                                                                   8
```

```
Sequence 49, Application US/10876086

| Sequence 49, Application US/2005006389A1
| CARBEAL INFORMATION:
| APPLICANT: Gallie, Daniel R. |
| APPLICANT: Young, Todd E. |
| APPLICANT: The Regents of the University of California |
| TITLE OF INVENTION: Genes, Which Produce Staygreen Characteristics in Maize |
| TITLE OF INVENTION: and Their Uses |
| TITLE OF INVENTION: and Their Uses |
| FILE REFERENCE: 023070-137010US |
| CURRENT FILING DATE: 2004-06-23 |
| NUMBER OF SEQ ID NOS: 50 |
| SEQ ID NO 49 |
| LENGTH: 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               APPLICANT: Areacter, Christian APPLICANT: Massire, Christian APPLICANT: Hofstadler, Steven A. APPLICANT: Hofstadler, Steven A. APPLICANT: Lowery, Kristin Sannes APPLICANT: Lowery, Kristin Sannes APPLICANT: Baker, Brenda F. APPLICANT: Baker, Brenda F. APPLICANT: Baker, Brenda F. TITLE OF INVENTION: Compositions And Methods For The Treatment Of Severe; TITLE OF INVENTION: Compositions And Methods For The Treatment of Score: TITLE OF INVENTION: Acute Respiratory Syndrome (SARS); FILE REFERENCE: ISISO083-100 (BIOL0008US); CURRENT FILING DATE: 2004-04-26; PRIOR PELICATION NUMBER: 60/466,426; PRIOR PELICATION NUMBER: 60/466,426; PRIOR FILING DATE: 2003-04-28; PRIOR FILING DATE: 2003-04-30; PRIOR FILING DATE: 2003-04-30; PRIOR FILING DATE: 2003-04-30
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ö
                                                                                                                                                                         ö
                                                                                                                                                                         Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  OTHER INFORMATION: Description of Artificial Sequence:oligo-dT(20); OTHER INFORMATION: primer US-10-876-086-49
OTHER INFORMATION: Description of Artificial Sequence: Synthetic; OTHER INFORMATION: Oligonucleotide US-10-601-140A-44
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ö
                                                                                                                                                                         ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Length 20;
                                                                                                           DB 1; Length 20;
2.6e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        0; Indels
                                                                                                                                                                         Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   DB 1; Le
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Query Match 0.4%; Score 20; DB Best Local Similarity 100.0%; Pred. No. 2.6 Matches 20; Conservative 0; Mismatches
                                                                                                                    Query Match 0.4%; Score 20; DB Best Local Similarity 100.0%; Pred. No. 2.6 Matches 20; Conservative 0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Sequence 29732, Application US/10831901A Publication No. US20050100885A1 GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  5025 AAAAAAAAAAAAAAAAA 5044
                                                                                                                                                                                                                                   5025 AAAAAAAAAAAAAAAA 5044
                                                                                                                                                                                                                                                                                       1 AAAAAAAAAAAAAAA 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        APPLICANT: Crooke, Stanley T.
APPLICANT: Becker, David J.
APPLICANT: Sampath, Rangarajan
APPLICANT: Preier, Susan M.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TYPE: DNA ORGANISM: Artificial Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        US-10-831-901A-29732/c
```

```
20 AAAAAAAAAAAAAAAA 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 US-10-831-901A-29735/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         US-10-831-901A-29734
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  APPLICANT: Sampath, Rangaralan
APPLICANT: Sampath, Rangaralan
APPLICANT: Freier, Susan M.
APPLICANT: Freier, Susan M.
APPLICANT: Hofstaller, Steven M.
APPLICANT: Hofstaller, Steven M.
APPLICANT: Hofstaller, Steven M.
APPLICANT: Lowery, Kristin Sannes
APPLICANT: Baker, Brenda F.
APPLICANTON NUMBER: US/10/831,901A
CURRENT FILING DATE: 2003-04-28
PRIOR APPLICATION NUMBER: 60/468,562
PRIOR APPLICATION NUMBER: 60/468,627
PRIOR APPLICATION NUMBER: 60/468,627
PRIOR FILING DATE: 2003-05-06
PRIOR FILING DATE: 2003-06-10
PRIOR APPLICATION NUMBER: 60/483,579
PRIOR APPLICATION NUMBER: 60/483,579
PRIOR APPLICATION NUMBER: 60/483,579
PRIOR APPLICATION NUMBER: 60/483,579
PRIOR PLING DATE: 2003-06-27
NUMBER OF SEQ ID NOS: 30063
SECO TO NO 20733
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Query Match

0.4%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 2.6e+02;
Matches 20; Conservative 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Query Match

0.4%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 2.6e+02;
Matches 20; Conservative 0; Mismatches 0; Indels
PRIOR APPLICATION NUMBER: 60/468,627
PRIOR FILING DATE: 2003-05-06
PRIOR PLING DATE: 2003-05-06
PRIOR APPLICATION NUMBER: 60/477,637
PRIOR PILING DATE: 2003-06-10
PRIOR PILING DATE: 2003-06-27
NUMBER OF SEQ ID NOS: 30063
SOFTWARE: PARLSEQ for Mindows Version 4.0
SEQ ID NO 29732
LENGTH: 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ; Sequence 29733, Application US/10831901A; Publication No. US20050100885A1; GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ; OTHER INFORMATION: Antisense compound US-10-831-901A-29733
                                                                                                                                                                                                                                                                                                                                                                                      ) OTHER INFORMATION: Antisense compound US-10-831-901A-29732
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               5025 AAAAAAAAAAAAAAAA 5044
||||||||||||||||||
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      5025 AAAAAAAAAAAAAAAA 5044
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    20 AAAAAAAAAAAAAAAAA 1
                                                                                                                                                                                                                                                                                                      TYPE: DNA
ORGANISM: Artificial Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TYPE: DNA
ORGANISM: Artificial Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            APPLICANT: Crooke, Stanley T.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Ecker, David J.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    SEQ ID NO 29733
LENGTH: 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ઠે
```

```
PREIGHLACHTON NO. USZUGGOLOGOBESAI

PRULICALION NO. USZUGGOLOGOBESAI

APPLICANT: Ecker, David J.

APPLICANT: Ecker, David J.

APPLICANT: Sampath, Rangarajan

APPLICANT: Freier, Susan M.

APPLICANT: Hossie, Christian

APPLICANT: Banker, Steven A.

APPLICANT: Baker, Eric

APPLICANT: Baker, Eric

APPLICANT: Baker, Brenda F.

APPLICANTON NUMBER: 60/466,426

PRIOR FILING DATE: 2003-05-06

PRIOR PLILOG DATE: 2003-06-06

PRIOR PLILNG DATE: 2003-06-06

PRIOR PLILNG DATE: 2003-06-10

PRIOR PLILNG DA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Sequence 29735, Application US/10831901A
Sequence 29735, Application US/10831901A
Publication No. US20050100885A1
GENERAL INFORMATION:
APPLICANT: Ecker, David J.
APPLICANT: Sampath, Rangarajan
APPLICANT: Freier, Steven M.
APPLICANT: Hofstadler, Steven A.
APPLICANT: Hofstadler, Steven A.
APPLICANT: Gwayze, Kristin Sannes
APPLICANT: Baker, Bric
APPLICANT: Baker, Brenda F.
APPLICANT: Baker, Brenda F.
APPLICANT: Compositions And Methods For The Treatment Of Severe
TITLE OF INVENTION: Acute Respiratory Syndrome (SARS)
TITLE OF INVENTION: Acute Respiratory Syndrome (SARS)
FILE REFERENCE: IS150083-100
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ô
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Gapa
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ô
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Query Match 0.4%; Score 20; DB 1; Length 20; Best Local Similarity 100.0%; Pred. No. 2.6e+02; Matches 20; Conservative 0; Mismatches 0; Indels
US-10-811-901A-29734/c
; Sequence 29734, Application US/10831901A
; Publication No. US20050100885A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            OTHER INFORMATION: Antisense compound
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    5025 AAAAAAAAAAAAAAAAA 5044
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TYPE: DNA ORGANISM: Artificial Sequence
```

```
ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           APPLICANT: Swayze, EIIC
APPLICANT: Baker, Brenda F.
APPLICANT: Baker, Brenda F.
APPLICANT: Baker, C. Frank
TITLE OF INVENTION: Compositions And Methods For The Treatment Of Severe
TITLE OF INVENTION: Acute Respiratory Syndrome (SARS)
TITLE OF INVENTION: Compositions and Methods For The Treatment Of Severe
TITLE OF INVENTION: Acute Respiratory Syndrome (SARS)
CURRENT ELIGHTON: BARDER: 2004-04-26
PRIOR APPLICATION NUMBER: 60/466,426
PRIOR APPLICATION NUMBER: 60/466,426
PRIOR APPLICATION NUMBER: 60/466,527
PRIOR APPLICATION NUMBER: 60/466,527
PRIOR APPLICATION NUMBER: 60/468,627
PRIOR PILING DATE: 2003-05-06
PRIOR PILING DATE: 2003-06-06
PRIOR PILING DATE: 2003-06-06
PRIOR PILING DATE: 2003-06-06
PRIOR PILING DATE: 2003-06-06
PRIOR PILING DATE: 2003-06-07
PRIOR PILING DATE: 2003-06-27
NUMBER: 60/483,579
PRIOR PILING DATE: 2003-06-27
NUMBER OF SEQ ID NOS: 30663
SOFTWARE: PastSEQ for Windows Version 4.0
SEQ ID NO 29736
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    0.4%; Score 20; DB 1; Length 20; 100.0%; Pred. No. 2.6e+02; tive 0; Mismatches 0; Indels
PRIOR APPLICATION UNMER: 60/466,426
PRIOR APPLICATION NUMBER: 60/466,426
PRIOR PILING DATE: 2003-04-28
PRIOR APPLICATION NUMBER: 60/466,562
PRIOR PILING DATE: 2003-05-06
PRIOR PILING DATE: 2003-06-06
PRIOR PILING DATE: 2003-04-30
PRIOR PILING DATE: 2003-06-6
PRIOR PILING DATE: 2003-06-6
PRIOR PILING DATE: 2003-06-6
PRIOR PILING DATE: 2003-06-10
PRIOR PILING DATE: 2003-06-10
PRIOR PILING DATE: 2003-06-17
PRIOR APPLICATION NUMBER: 60/483,579
PRIOR FILING DATE: 2003-06-27
NUMBER OF SEQ ID NOS: 30063
SEQ ID NO 29735
LENGTH: 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    US-10-831-901A-29736/C

Sequence 29736, Application US/10831901A
Publication No. US20050100885A1
GENERAL INFORMATION:
APPLICANT: Crooke, Stanley T.
APPLICANT: Bcker, David J.
APPLICANT: Sampath, Rangarajan
APPLICANT: Freier, Susan M.
APPLICANT: Hofstadler, Steven A.
APPLICANT: Hofstadler, Steven A.
APPLICANT: Lowery, Kristin Sannes
APPLICANT: Swayze, Eric
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CTHER INFORMATION: Antisense compound US-10-831-901A-29736
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           OTHER INFORMATION: Antisense compound US-10-831-901A-29735
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        5025 AAAAAAAAAAAAAAAA 5044
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               20 AAAAAAAAAAAAAAAAA 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TYPE: DNA ORGANISM: Artificial Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TYPE: DNA
ORGANISM: Artificial Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Local Similarity Local Similarity Local 20, Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Best Loca
Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               엄
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ò
```

```
Sequence 22, Application US/10789831

Sequence 22, Application US/10789831

Sequence 22, Application No. US20050130174A1

GENERAL INFORMATION:
GENERAL INFORMATION:
HAPPLICANT: Bao. Yijia P.
APPLICANT: BAO. Yijia P.
TITLE OF INVENTION: LABEL-FREE GENE EXPRESSION PROFILING WITH UNIVERSAL NANOPARTICLE
TITLE OF INVENTION: LABEL-FREE GENE EXPRESSION PROFILING WITH UNIVERSAL NANOPARTICLE
TITLE OF INVENTION: PROBES IN MICROARRAY ASSAY FORMAT
FILE REFERENCE: 03-214-A
CURRENT APPLICATION NUMBER: US/10/789,831

CURRENT FILING DATE: 2004-02-27

PRIOR FILING DATE: 2003-02-27

NUMBER OF SEQ ID NOS: 24

SOFTWARE PATENTIN Version 3.3

SEQ ID NO S.
LENGTH: 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      APPLICANT: Bao, Yijia P.
APPLICANT: Mailer, Uwe R.
TITLE OF INVENTION: LABEL-FREE GENE EXPRESSION PROFILING WITH UNIVERSAL NANOPARTICLE.
TITLE OF INVENTION: LABEL-FREE GENE EXPRESSION PROFILING WITH UNIVERSAL NANOPARTICLE.
TITLE OF INVENTION: PROBES IN MICROARRAY ASSAY FORMAT
FILE REFERENCE: 03-214-A
CURRENT APPLICATION UNMERE: US 60/450,268
PRIOR APPLICATION NUMBER: US 60/450,268
PRIOR FILING DATE: 2003-02-27
NUMBER OF SEQ ID NOS: 24
SOFTWARE: PATENTIN VERSION 3.3
SEQ ID NO 23
SEQ ID NO 23
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ö
                                                     ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Gaps
                                                       Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               NAME/KEY: unsure
LOCATION: (1)..(1)
OTHER INFORMATION: t comprises an epiandrosterone disulfide group
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      NAME/KEY: unsure; LOCATION: (1)...(1); COCATION: (1)...(1); OTHER INFORMATION: a comprises an epiandrosterone disulfide group 19s-10-789-831-22
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      .
0
                                                     .;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Length 20;
0.4%; Score 20; DB 1; Length 20;
100.0%; Pred. No. 2.6e+02;
tive 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Query Match
0.4%; Score 20; DB 1; Le
Best Local Similarity 100.0%; Pred. No. 2.6e+02;
Matches 20; Conservative 0; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           5025 AAAAAAAAAAAAAAAAAA 5044
                                                                                                               5025 AAAAAAAAAAAAAAAA 5044
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ; Sequence 23, Application US/10789831
; Publication No. US20050130174A1
; GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         OTHER INFORMATION: detection probe
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 OTHER INFORMATION: detection probe
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AAAAAAAAAAAAAAAAAA 20
                                                                                                                                                      20 AAAAAAAAAAAAAAAA 1
        Query Match
Best Local Similarity 100.0
Matches 20; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ORGANISM: Artificial
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TYPE: DNA ORGANISM: Artificial
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              RESULT 436
US-10-789-831-23/c
                                                                                                                                                                                                                                                   RESULT 435
US-10-789-831-22
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TYPE: DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ద
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   δ
                                                                                                                                                                       셤
```

```
Sequence 15, Application US/10661402

| Publication No. US20050153912A1
| GENERAL INFORMATION:
| APPLICANT: VAILLANT; ANDREM
| APPLICANT: UTEAUT, JURAN-MARC
| TITLE OF INVERTION: ANTIVIRAL OLIGONUCLEOTIDES TARGETING VIRAL PAMILIES
| FILE REFERENCE: 029949/0207|
| CURRENT APPLICATION NUMBER: US/10/661,402
| CURRENT PELING DATE: 2003-09-12
| PRIOR FILING DATE: 2003-09-11
| PRIOR FILING DATE: 2003-09-11
| PRIOR FILING DATE: 2002-09-13
| PRIOR FILING DATE: 2002-09-13
| NUMBER OF SEQ ID NOS: 36
| SEQ ID NO 1: 20
                                      ô
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Sequence 10. Application US/10847502

| Sequence 10. Application US/10847502
| Publication No. US20050165226A1
| GENERAL INFORMATION:
| APPLICANT: Cole, Douglas L. | APPLICANT: Cole, Douglas L. | APPLICANT: Cheruvallath, Zacharia S. | TITLE OF INVENTION: IMPROVED SYNTHESIS OF SULPURIZED OLIGONUCLEOTIDES | TITLE OF INVENTION: IMPROVED SYNTHESIS OF SULPURIZED OLIGONUCLEOTIDES | TITLE OF INVENTION: IMPROVED SYNTHESIS OF SULPURIZED OLIGONUCLEOTIDES | TITLE OF INVENTION: IMPROVED SYNTHESIS OF SULPURIZED OLIGONUCLEOTIDES | TILLE OF INVENTION NUMBER: US/10/181,200 | PRIOR FILLING DATE: 2002-12-12 | PRIOR FILLING DATE: 2001-1.10 | PRIOR FILLING DATE: 2001-1.10 | PRIOR FILLING DATE: 2000-01-11 | NUMBER OF SEQ ID NOS: 16 | SEQ ID NOS: 16 | SEQ ID NOS: 06 | SEQ ID NO 10 | SEQ ID N
                                      Gapa
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ) OTHER INFORMATION: Description of Artificial Sequence: Synthetic; CTHER INFORMATION: Oligonucleotide
                                          ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Query Match 0.4%; Score 20; DB 1; Length 20; Best Local Similarity 100.0%; Pred. No. 2.6e+02; Matches 20; Conservative 0; Mismatches 0; Indels
                                      IndelB
       Pred. No. 2.6e+02;
                                      0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   FEATURE:
OTHER INFORMATION: Synthetic Construct
                                                                                                  5025 AAAAAAAAAAAAAAAA 5044
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                5025 AAAAAAAAAAAAAAA 5044
                                                                                                                                                                    1 AAAAAAAAAAAAAAA 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               20 AAAAAAAAAAAAAAAAAAA 1
   Best Local Similarity 100.0%; Matches 20; Conservative 0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TYPE: DNA ORGANISM: Artificial Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ORGANISM: Artificial Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         NAME/KEY: misc_feature
                                                                                                                                                                                                                                                                                                          JS-10-661-402-15/c
                                                                                                     ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                          Sequence 24. Application US/10789831
Publication No. US20050130174A1
GENERAL INROWANTION:
APPLICANT: Bao, Yijia P.
APPLICANT: Muller, Uwe R.
TITLE OF INVENTION: LABEL-FREE GENE EXPRESSION PROFILING WITH UNIVERSAL NANOPARTICLE
FILE REPERENCE: 03-214-A
CURRENT APPLICATION NUMBER: US/10/789,831
CURRENT PILING DATE: 2004-02-27
PRIOR FILING DATE: 2003-02-27
NUMBER OF SEQ ID NOS: 24
SOFTWARE: Patentin version 3.3
SEQ ID NO 24
LENGTH: 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Sequence 12, Application US/10661402
; Sequence 12, Application US/20050153912A1
; General Information:
; APPLICART: VAILLANT: ANDREW
; APPLICANT: UTLEAU. TAILLANT: ANDREW
; APPLICANT: UTLEAU. JEAN-MARC
; TITLE OF INVENTION: ANTIVIRAL OLIGONUCLEOTIDES TARGETING VIRAL FAMILIES
; FILE REPRENCE: 029849/0207
; CURRENT APPLICATION NUMBER: US/10/661,402
; CURRENT FILING DATE: 2003-09-12
; PRIOR APPLICATION NUMBER: G0/430,934
; PRIOR FILING DATE: 2002-12-05
; PRIOR FILING DATE: 2002-10-13
; PRIOR FILING DATE: 2002-09-13
; NUMBER OF SEQ ID NOS: 36
; SOFTWARE: Patentin Ver. 3.2
; SEQ ID NO 12
LENGTH: 20
                                                                                                                                        ö
                                                                                                                                     Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                OTHER INFORMATION: Description of Artificial Sequence: Synthetic OTHER INFORMATION: oligonucleotide
                                                                                                                                        ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ö
                                                               Score 20; DB 1; Length 20;
Pred. No. 2.6e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Query Match 0.4%; Score 20; DB 1; Length 20; Best Local Similarity 100.0%; Pred. No. 2.6e+02; Matches 20; Conservative 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            0.4%; Score 20; DB 1; Length 20;
                                                                                                                                 0; Indels
                                                           Query Match 0.4%; Score 20; DB Best Local Similarity 100.0%; Pred. No. 2.6 Matches 20; Conservative 0; Mismatches
                                                                                                                                                                                                5025 AAAAAAAAAAAAAAAA 5044
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         5025 AAAAAAAAAAAAAAA 5044
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ; OTHER INFORMATION: detection probe US-10-789-831-24
                                                                                                                                                                                                                                                                   20 AAAAAAAAAAAAAAA 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TYPE: DNA
ORGANISM: Artificial Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TYPE: DNA ORGANISM: Artificial
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          RESULT 438
US-10-661-402-12
US-10-789-831-23
                                                                                                                                                                                                                                                                                                                                                                     RESULT 437
US-10-789-831-24
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      US-10-661-402-12
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     FEATURE:
                                                                                                                                                                                                    ò
                                                                                                                                                                                                                                                                g
```

ö

```
Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    .;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       h 0.4%; Score 20; DB 1; Length 21; Similarity 100.0%; Pred. No. 2.7e+02; Conservative 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                           Query Match
0.4%; Score 20; DB 1; Length 21;
Best Local Similarity 100.0%; Pred. No. 2.7e+02;
Matches 20; Conservative 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                      ; OTHER INFORMATION: PCR Oligonuclectide Primer 3.18 ECORI US-10-025-145A-35
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Sequence 23, Application US/10913246

Sequence 23, Application US/10913246

Publication No. US20050003441A1

GENERAL INFORMATION:

APPLICAMY: Kurn, Nurith

TITLE OF INVENTION: AMPLIFICATION OF RNA SEQUENCES

TITLE OF INVENTION: 4265000500

CURRENT FILING DATE: 2004-08-05

PRIOR FILING DATE: 2004-03-05

PRIOR FILING DATE: 2001-03-09

NUMBER OF SEQ ID NOS: 25

SOFTWARE: FastSEQ for Windows Version 4.0

LENGTH: 21

LENGTH: 21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     RESULT 444

US-10-934-890-23

US-10-934-890-23

Sequence 23, Application US/10934890

Publication No. US20050014192A1

GENERAL INFORMATION:

APPLICANT: Kurn, Nurith

TITLE OF INVENTION: METHODS AND COMPOSITIONS FOR

TITLE OF INVENTION: AMPLIFICATION OF RNA SEQUENCES
CURRENT APPLICATION NUMBER: US/10/025,145A
CURRENT FILING DATE: 2002-06-28
PRIOR APPLICATION NUMBER: US 09/360,545
PRIOR FILING DATE: 1999-07-26
PRIOR FILING DATE: 1999-07-26
PRIOR FILING DATE: 1999-07-10
PRIOR FILING DATE: 1998-07-10
PRIOR FILING DATE: 1998-07-11
NUMBER OF SEQ ID NOS: 107
SOFTWARE: PATENT NOS: 107
SOFTWARE: PATENT VERSION 3.1
SOFTWARE: 21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              5025 AAAAAAAAAAAAAAAA 5044
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    , OTHER INFORMATION: n = A,T,C or G US-10-913-246-23
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            2 AAAAAAAAAAAAAAAA 21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        13 CTGCAGGAATTCGGCACGAG 32
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1 CTGCAGGAATTCGGCACGAG 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TYPE: DNA ORGANISM: Artificial Sequence
                                                                                                                                                                                                                                                                                                                               ORGANISM: Artificial Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          INFORMATION: Primer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   NAME/KEY: misc_feature LOCATION: 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     20;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Query Match
Best Local
                                                                                                                                                                                                                                                                                                             TYPE: DNA
                                                                                                                                                                                                                                                                                                                                                              FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ö
                                                                                                                                                                                                                                                                 ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                Sequence 15, Application US/10847502
; Sequence 15, Application US/10847502
; Publication No. US2005016526A1
; GENERAL INFORMATION:
   APPLICANT: Cole, Douglas I.
; APPLICANT: Ravikumar, Vasulinga T.
; APPLICANT: Cheruvallath, Zacharia S.
TITLE OF INVENTION: IMPROVED SYNTHESIS OF SULFURIZED OLIGONUCLEOTIDES
; FILE REFERENCE: ISIS-4709
; CURRENT APPLICATION NUMBER: US/10/847,502
CURRENT FILING DATE: 2004-05-17
; PRIOR APPLICATION NUMBER: US/10/181,200
; PRIOR PLING DATE: 2002-12-12
; PRIOR PLING DATE: 2000-11-10
; PRIOR PLING DATE: 2000-01-11
; NUMBER OF SEQ ID NOS: 16
; SOFTWARE: PatentIn version 3.2
; SEQ ID NO 15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          APPLICANT: Bohlmann, Joerg
APPLICANT: Steele, Christopher L.
APPLICANT: Phillips, Michael A.
TITLE OF INVENTION: Monoterpene Synthases from Grand Fir (Abies Grandis)
FILE REFERENCE: WSUR118414
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Gaps
                                                                                                                                                                                                                                                                    Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    .
0
                                                                                                                                                                                                                                                                    .
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Query Match

0.4%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 2.6e+02;
Matches 20; Conservative 0; Mismatches 0; Indels
                                                                                                                                                                                                              Query Match 0.4%; Score 20; DB 1; Length 20; Best Local Similarity 100.0%; Pred. No. 2.6e+02; Matches 20; Conservative 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               NAME/KEY: misc_feature; LOCATION: (1)...(20); OTHER INFORMATION: phosphorothioate 20-mer 10S-10-847-502-15
                                                                                       NAME/KEY: misc_feature
LOCATION: (1)...(20)
CTHER INFORMATION: phosphorothioate 20-mer
US-10-847-502-10
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  OTHER INFORMATION: Synthetic Construct
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               RESULT 442
US-10-025-145A-35
Sequence 35, Application US/10025145A
Publication No. US20030175861A1
GENERAL INFORMATION:
APPLICANT: Croteau, Rodney B.
                       LOCATION: (1)..(1)
OTHER INFORMATION: 2'-0-methoyxethyl
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     5025 AAAAAAAAAAAAAAAAA 5044
                                                                                                                                                                                                                                                                                                                       5025 AAAAAAAAAAAAAAAA 5044
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    20 AAAAAAAAAAAAAAAA 1
                                                                                                                                                                                                                                                                                                                                                                   20 AAAAAAAAAAAAAAAAAA 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         FEATURE:
NAME/KEY: misc_feature
LOCATLON: (1)..(1)
OTHER INFORMATION: 2'-0-methyl
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TYPE: DNA
ORGANISM: Artificial Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      임
                                                                                                                                                                                                                                                                                                                             ð
                                                                                                                                                                                                                                                                                                                                                                      g
```

ö

```
Sequence 75557, Application US/10681773

Publication No. US200146890A1

GENERAL INFORMATION:

APPLICANT: Metuzaki, Hajime

APPLICANT: Shen, Mei-Mei

APPLICANT: Shen, Mei-Mei

APPLICANT: Shen, Mei-Mei

TITLE OF INVENTION: Methods for Genotyping Polymorphisms in Humans

TITLE OF INVENTION: WITHOR WETHOGS 152.2

CURRENT APPLICATION NUMBER: US/10/681,773

CURRENT FILING DATE: 2002-10-07

PRIOR APPLICATION NUMBER: 60/470,475

PRIOR APPLICATION NUMBER: 60/417,190

PRIOR APPLICATION NUMBER: 60/417,190

PRIOR APPLICATION NUMBER: 60/417,190

SPROR FILING DATE: 2002-10-07

NUMBER OF SEQ ID NOS: 124031

SEQ ID NO 75257

LENGTH: 25
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ô
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              0.4%; Score 19.8; DB 1; Length 25; 91.3%; Pred. No. 3.3e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Sequence 60, Application US/09776479
Publication No. US20030087848A1
GENERAL INFORMATION:
APPLICANT: Bratzler, Robert L.
APPLICANT: Petersen, Deanna M.
APPLICANT: Pouron, Yves
TITLE OF INVENTION: Immunostimulatory Nucleic Acids for the
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Length 25;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Indela
                                                                         TITLE OF INVENTION: Attogene Nucleic Acids Encoding a TITLE OF INVENTION: Secretable RNA Polymerase; FILE REFERENCE: 020801-000320US CURRENT APPLICATION NUMBER: US/10/688,299 CURRENT FILING DATE: 2003-10-16; PRIOR APPLICATION NUMBER: US 60/287,974 PRIOR PILING DATE: 2001-04-30; PRIOR PILING DATE: 2001-04-30; PRIOR PILING DATE: 2002-04-30; PRIOR FILING DATE: 2002-04-30; SEQ ID NOS: 54; SEQ ID NO 54; SEQ ID
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Query Match 0.4%; Score 20; DB 1; L
Best Local Similarity 100.0%; Pred. No. 3.2e+02;
Matches 20; Conservative 0; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     2137 GGAAATTATGACACAGAGCTCCA 2159
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1 GGAAATTTTGACACAGAGCTACA 23
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1 GGATCCCCCGGGCTGCAGGA 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             20 GGATCCCCCGGGCTGCAGGA 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ; OTHER INFORMATION: NVSC1 primer US-10-688-299-54
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TYPE: DNA ORGANISM: Artificial Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Best Local Similarity 91.33
Matches 21; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ; TYPE: DNA
; ORGANISM: Homo Bapien
US-10-681-773-75257
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       RESULT 448
US-09-776-479-60/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        GENERAL INCREMIT: HOOPET, U34 W.

APPLICANT: Hooper, U34 W.

APPLICANT: Schmaljohn, Connie S.

APPLICANT: Cucker, Max

TITLE OF INVENTION: DNA Vaccines Against Hantavirus Infections
FILE REFERENCE: 003/25/SAP

CURRENT APPLICATION NUMBER: US/10/394,388A

CURRENT FILING DATE: 2003-03-21

PRIOR PILING DATE: 2000-01-27

PRIOR FILING DATE: 2000-01-27

PRIOR FILING DATE: 2002-07-26

PRIOR FILING DATE: 2002-07-26

NUMBER OF SEQ ID NOS: 22

SOFTWARE: Apple Macintosh Microsoft Word 6.0

SEQ ID NO 6

LENTH: 24
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Length 21;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Query Match

0.4%; Score 20; DB 1; Length 24;
Best Local Similarity 100.0%; Pred. No. 3.1e+02;
Matches 20; Conservative 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CTHER INFORMATION: Sequence of 24 bp extraneous sequence US-10-394-388A-6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Query Match 0.4%; Score 20; DB 1; L
Best Local Similarity 100.0%; Pred. No. 2.7e+02;
Matches 20; Conservative 0; Mismatches 0;
FILE REFERENCE: 492692000500
CURRENT APPLICATION NUMBER: US/10/934,890
CURRENT FILING DATE: 2004-09-03
PRIOR APPLICATION NUMBER: US/10/100,321
PRIOR FILING DATE: 2002-03-11
PRIOR FILING DATE: 2002-03-13
PRIOR FILING DATE: 2001-03-09
NUMBER OF SEQ ID NOS: 25
SOFTWARE: PastSEQ for Windows Version 4.0
SEGO ID NO 23
LENGTH: 21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    5025 AAAAAAAAAAAAAAAA 5044
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  US-10-688-299-54/c
; Sequence 54, Application US/10688299
; Publication No. US20040142892A1
; GENERAL INFORMATION:
; APPLICANT: Finn, John
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Sequence 6, Application US/10394388A, Publication No. US20040053216A1, GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       NAME/KEY: misc_feature
i LOCATION: 1
i CTHER INFORMATION: n = A,T,C or G
US-10-934-890-23
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 13 CTGCAGGAATTCGGCACGAG 32
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CTGCAGGAATTCGGCACGAG 24
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         2 AAAAAAAAAAAAAAA 21
                                                                                                                                                                                                                                                                                                                                                                                                                     TYPE: DNA ORGANISM: Artificial Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ORGANISM: Artificial sequence
FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      OTHER INFORMATION: Primer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                US-10-394-388A-6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          LYPE: DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   음
```

ઠે

```
US-10-314-578-60/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             RESULT 451
US-10-017-995-60/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 SEQ ID NO 60
LENGTH: 24
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         RESULT 452
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Sequence 54, Application US/10112653
Sequence 54, Application US/20112653
Publication No. US20030050268A1
GENERAL INFORMATION:
APPLICANT: Krieg, Arthur M.
APPLICANT: Krieg, Daniel J.
TITLE OF INVENTION: INMUNOSTIMULATORY NUCLEIC ACID FOR
TITLE OF INVENTION: TREATMENT OF NON-ALLERGIC INFLAMMATORY DISEASES
FILE REPERENCE: COLO39/70060(AMS)
CURRENT APPLICATION NUMBER: US/10/112,653
CURRENT FILING DATE: 2002-03-29
PRIOR FILING DATE: 2001-03-29
PRIOR FILING DATE: 2001-03-29
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            RESULT 449
US-09-776-479-60/C
Sequence 60, Application US/09776479
Sequence 60, Application US/09776479
Sequence 60, No. US2004006790249
SEGNERAL INFORMATION:
APPLICANT: Bratzler, Robert L.
APPLICANT: Petersen, Deanna M.
TITLE OF INVENTION: Treatment of Asthma and Allergy
TITLE OF INVENTION: Treatment of Asthma and Allergy
TITLE OF INVENTION: Treatment of Asthma and Allergy
CURRENT APPLICATION NUMBER: US/09/776,479
CURRENT FILING DATE: 2001-02-02
PRIOR APPLICATION NUMBER: US 60/179,991
PRIOR FILING DATE: 2000-02-03
NUMBER OF SEQ ID NOS: 1093
SOFTWARE: FastSEQ for Windows Version 3.0
LENGTH: 24
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ch 0.4%; Score 19.2; DB 1; Length 24; al Similarity 87.5%; Pred. No. 3.5e+02; 21; Conservative 0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           0.4%; Score 19.2; DB 1; Length 24; ld Similarity 87.5%; Pred. No. 3.5e+02; 21; Conservative 0; Migmath.
    Treatment of Asthma and Allergy
TITLE OF INVENTION: Treatment of Asthma and FILE REFERENCE: C1037/7013 (HCL/MAT); CURRENT APPLICATION NUMBER: US/09/776,479; CURRENT FILING DATE: 2001-02-02; PRIOR APPLICATION NUMBER: US 60/179,991; PRIOR FILING DATE: 2000-02-03; NUMBER OF SEQ ID NOS: 1093; SOFTWARE: FastSEQ for Windows Version 3.0; SEQ ID NO EDITOR FILING DATE: ALL NOT THE SECOND SE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      5025 AAAAAAAAAAAAAAAAAAAAA 5048
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 5025 AAAAAAAAAAAAAAAAAAAAAA 5048
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ; OTHER INFORMATION: Synthetic Sequence US-09-776-479-60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ; OTHER INFORMATION: Synthetic Sequence US-09-776-479-60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                24 AAAAACAAAAAAACAAAAAAAAA 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TYPE: DNA
ORGANISM: Artificial Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                             TYPE: DNA ORGANISM: Artificial Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Query Match
Best Local Similarity
Matches 21; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       RESULT 450
US-10-112-653-54/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             FEATURE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ઠે
```

```
ö
                                                                                                                                                                                                                                                                                ö
                                                                                                                                                                                                                                                                                Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                            ô
                                                                                                                                                                                                                                                                                     ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                0.4%; Score 19.2; DB 1; Length 24;
87.5%; Pred. No. 3.5e+02;
                                                                                                                                                                                                                                         Length 24;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Indels
                                                                                                                                                                                                                                                                                  Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Sequence 60, Application US/10314578
; Sequence 60, Application US/10314578
; publication No. US20030212026A1
; GENERAL INFORMATION:
APPLICANT: Krieg, Arthur M.
; APPLICANT: Schetter, Christian
APPLICANT: Vollmer, Jorg
; TITLE OF INVENTION: Immunistimulatory Nucleic Acids
; FILE REFERENCE: C1039/7035 (HCL/MAT)
; CURRENT APPLICATION NUMBER: US 60/156,113
; CURRENT FILING DATE: 1909-09-25
; PRIOR APPLICATION NUMBER: US 60/156,113
; PRIOR FILING DATE: 1999-09-27
; PRIOR FILING DATE: 2000-08-23
; NUMBER OF SEQ ID NOS: 1145
                                                                                                                                                                                                                                      Query Match

0.4%; Score 19.2; DB 1;
Best Local Similarity 87.5%; Pred. No. 3.5e+02;
Matches 21; Conservative 0; Mismatches 3;
                                                                                                                                                                    , OTHER INFORMATION: Synthetic Oligonucleotide US-10-112-653-54
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            0; Mismatches
SOFTWARE: FastSEQ for Windows Version 3.0 SEQ ID NO 54 LENGTH: 24
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   5025 AAAAAAAAAAAAAAAAAAAAA 5048
                                                                                                                                                                                                                                                                                                                              5025 AAAAAAAAAAAAAAAAAAAAA 5048
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    OTHER INFORMATION: Synthetic Sequence US-10-017-995-60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           24 AAAAACAAAAAAACAAAAAAAAA 1
                                                                                                                                                                                                                                                                                                                                                                      24 AAAAACAAAAAAAAAAAAAAAAA 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TYPE: DNA ORGANISM: Artificial Sequence
                                                                                                                TYPE: DNA
ORGANISM: Artificial Sequence
FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Query Match
Best Local Similarity 87.5%
```

```
24 TCTTGGGACTGACGGTCGGCCCTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ORGANISM: Mus musculus US-10-719-900-18911
                                                                                                                                                                                                                                                                                                                                                                                                                                                        ORGANISM: Homo sapien
                                                                                                         JS-10-098-263B-76254/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               US-10-098-263B-76254
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          US-10-719-900-228029
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         US-10-719-900-18911
                                                                                                                                                                                                                                                                                                                                                                                                                                      TYPE: DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TYPE: DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        RESULT 457
                        8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ò
                                                                                                                                                   ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ô
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Gaps
                                                                                                                                                     Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Gaps
                                                                                                                                                   ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ö
                                                                                                                                                                                                                                                                                                                                                                                                     APPLICANT: Bratzler, Robert L.
APPLICANT: Petersen, Deanna M.
APPLICANT: Fouron, Yvea
TITLE OF INVENTION: Treatment of Aethma and Allergy
TITLE OF INVENTION: Treatment of Aethma and Allergy
FILE REPRENCE: C103/7013 (HCL/MAT)
CURRENT APPLICATION NUMBER: US/10/831,778
PRIOR APPLICATION NUMBER: US 60/179,991
PRIOR APPLICATION NUMBER: US 60/179,991
PRIOR PRILING DATE: 2000-02-03
NUMBER OF SEQ ID NOS: 1093
SOFTWARE: FaetSEQ for Windows Version 3.0
LENGTH: 24
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Sequence 76253, Application US/10099263B
; Publication No. US20030104410A1
; GENERAL INFORMATION:
; APPLICANT: Mittenan, Michael
; FILE REFERENCE: 3118.1
; FILE REFERENCE: 3118.1
; CURRENT APPLICATION NUMBER: US/10/098,263B
; CURRENT PILING DATE: 2003-01-08
; PRIOR FILING DATE: 2003-01-08
; REAL OF SEQUENCE: 313.066
; SOFTWARE: Microarray Probe Sequence Listing Generator V 1.1
; LEADON: 1.2007
                                                                                                      ch     0.4%; Score 19.2; DB 1; Length 24;
1 Similarity 87.5%; Pred. No. 3.5e+02;
21; Conservative 0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Length 24;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Query Match
0.4%; Score 19.2; DB 1; Length 25;
Best Local Similarity 87.5%; Pred. No. 3.6e+02;
Matches 21; Conservative 0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Query Match 0.4%; Score 19.2; DB 1; Best Local Similarity 87.5%; Pred. No. 3.5e+02; Matches 21; Conservative 0; Mismatches 3;
                                                                                                                                                                                         5025 AAAAAAAAAAAAAAAAAAAAA 5048
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 5025 AAAAAAAAAAAAAAAAAAAA 5048
                                          OTHER INFORMATION: Synthetic Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             OTHER INFORMATION: Synthetic Sequence US-10-831-778-60
                                                                                                                                                                                                                      24 AAAAACAAAAAAACAAAAAAAAA 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           24 AAAAACAAAAAAAAAAAAAAA 1
                                                                                                                                                                                                                                                                                              RESULT 453
US-10-831-778-60/c
Sequence 60, Application US/10831778
Publication No. US20040235774A1
GENERAL INFORMATION:
ORGANISM: Artificial Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TYPE: DNA
ORGANISM: Artificial Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Homo sapien
                                                                                                                        Best Local Similarity
Matches 21; Conserva
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          RESULT 454
US-10-098-263B-76253/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      US-10-098-263B-76253
                                                              US-10-314-578-60
                                                                                                         Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TYPE: DNA
ORGANISM:
                                                                                                                                                                                                                               g
                                                                                                                                                                                         ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ઠે
```

80 TCTTGGGACTGGCGGTCTGCACTT 103

```
ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Gарв
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Gape
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ö
Sequence 76254, Application US/10098263B
Fublication No. US20030104410A1
GENERAL INFORMATION:
APPLICANT MITTEMN, Michael
TITLE OF INVENTION: Human Microarray
FILE REFERENCE: 3118.1
CURRENT APPLICATION NUMBER: US/10/098,263B
CURRENT APPLICATION NUMBER: 60/276,759
FRIGN APPLICATION NUMBER: 60/276,759
FRIGN FILING DATE: 2001-03-16
NUMBER OF SEQ ID NOS: 131066
SOFTWARE: Microarray Probe Sequence Listing Generator V 1.1
LENGTH: 25
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Query Match 0.4%; Score 19.2; DB 1; Length 25; Best Local Similarity 87.5%; Pred. No. 3.6e+02; Matches 21; Conservative 0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Length 25;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Sequence 18911, Application US/10719900

Publication No. US20050026164A1

GENERAL INFORMATION:

APPLICANT: Xue Mei Zhou

TITLE OF INVENTION: Methods of Genetic Analysis of Mouse

FILE REFRENCE: 35281

CURRENT FILING DATE: 2003-11-20

PRIOR PILING DATE: 2003-11-20

PRIOR PILING DATE: 2002-11-20

NUMBER OF SEQ ID NOS: 982914
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           SOFTWARE: Microarray Probe Sequence Listing Generator V 1.1 SEQ ID NO 18911
LENGTH: 25
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ; Sequence 228029, Application US/10719900
; Publication No. US20050026164A1
; ADELICANT: Xue Mei Zhou
; TITLE OF INVENTION:
; TITLE OF INVENTION: Methods of Genetic Analysis of Mouse
; FILE REFERENCE: 3528.1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Query Match 0.4%; Score 19.2; DB 1; Best Local Similarity 87.5%; Pred. No. 3.6e+02; Matches 21; Conservative 0; Mismatches 3;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CURRENT APPLICATION NUMBER: US/10/719,900 CURRENT FILING DATE: 2003-11-20 PRIOR APPLICATION NUMBER: 60/427,808
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  4639 AAATAAAACCTACTGATTTGTATA 4662
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       80 TCTTGGGACTGGCGGTCTGCACTT 103
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1 AAATAACTĆCTACTGTTTTGTATA 24
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         24 rcrredeacrercecrcrr 1
```

```
25 GAAAATGCTGAGTGGCAGTGTAAA 2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ; ORGANISM: Mus musculus US-10-719-900-872675
                                                                                                                                                                                                                                                                                                                                                                                                               TYPE: DNA ORGANISM: Mus musculus
                                                                                     US-10-719-900-334399
                                                                                                                                                                                                                                                                                                                                                                                                                                                        US-10-719-900-334399
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ઠે
    g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ö
                                                                                                                                                                                                                                             ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Gaps
                                                                                                                                                                                                                                               Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ;
0
                                                                                                                                                                                                                                               .;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Sequence 286591/C

Sequence 286591, Application US/10719900

Sequence 286591, Application No. US2005026164A1

GENERAL INFORMATION:

APPLICANT: Xue Mei Zhou

TITLE OF INVENTION: Methods of Genetic Analysis of Mouse

TITLE OF INVENTION NUMBER: US/10/719,900

CURRENT FILING DATE: 2003-11-20

PRIOR FILING DATE: 2002 11 20

PRIOR FILING DATE: 2002 11 20

NUMBER OF SEQ ID NOS: 982914

SOFTWARE: Microarray Probe Sequence Listing Generator V 1.1

SEQ ID NO 286591
                                                                                                                                                                                                                                                                                                                                                                                                Sequence 228030

Sequence 228030, Application US/10719900

Sequence 228030, Application No. US2005026164A1

GENERAL INFORMATION:

APPLICANT: Xue Mei Zhou

TITLE OF INVENTION:

FILE REFERENCE: 3528.1

CURRENT APPLICATION NUMBER: US/10/719,900

CURRENT FILING DATE: 2003-11-20

PRIOR FILING DATE: 2003-11-20

PRIOR FILING DATE: 2002 11 20

NUMBER OF SEQ ID NOS: 982914

SOFTWARE: Microarray Probe Sequence Listing Generator V 1.1

SEQ ID NO 228030

LENGHIALS

LENGHIALS

LENGHIALS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Query Match 0.4%; Score 19.2; DB 1; Length 25; Best Local Similarity 87.5%; Pred. No. 3.6e+02; Matches 21; Conservative 0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Query Match 0.4%; Score 19.2; DB 1; Length 25; Best Local Similarity 87.5%; Pred. No. 3.6e+02; Matches 21; Conservative 0; Mismatches 3; Indels
                                                                                                                                                                                                Query Match 0.4%; Score 19.2; DB 1; Length 25; Best Local Similarity 87.5%; Pred. No. 3.6e+02; Matches 21; Conservative 0; Mismatches 3; Indels
    PRIOR FILING DATE: 2002 11 20
NUMBER OF SEQ ID NOS: 982914
SOFTWARE: Microarray Probe Sequence Listing Generator V 1.1
SEQ ID NO 228029
LENGTH: 25
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                743 ATCCCACATTGCCTTTAACCAGCT 766
                                                                                                                                                                                                                                                                                          743 ATCCCACATTGCCTTTAACCAGCT 766
                                                                                                                                                                                                                                                                                                                     ; ORGANISM: Mus musculus US-10-719-900-286591
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TYPE: DNA
CORGANISM: Mus musculus
US-10-719-900-228030
                                                                                                                     TYPE: DNA
CORGANISM: Mus musculus
US-10-719-900-228029
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ઠે
                                                                                                                                                                                                                                                                                                 ઠે
                                                                                                                                                                                                                                                                                                                                     a
```

3463 GAAAATGCTGAATGGGAGAGTAAA 3486

```
ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                US-10-719-900-872675
US-10-719-900-872675
Sequence 872675, Application US/10719900
Sequence 872675, Application US/10719900
Sequence 872675, Application US/10719900
SEQUENCE INFORMATION:
APPLICANT: Xue Mei Zhou
STILLE REFERENCE: 3528.
CURRENT APPLICATION NUMBER: US/10/719,900
CURRENT FILING DATE: 2003-11-20
SPIOR FILING DATE: 2003-11-20
SPIOR FILING DATE: 2002 11 20
SPIOR FILING DATE: 2002 11 20
SOFTWARE: Microarray Probe Sequence Listing Generator V 1.1
SEQ ID NO 872675
SEQ ID NO 872675
SEQ ID NO 872675
SEQ ID NO 872675
Sequence 334399, Application US/10719900
; Sequence 334399, Application No. US20050026164A1
; Publication No. US20050026164A1
; GENERAL INFORMATION:
    APPLICATH: Kue Met Zhou
    TITLE OF INVENTION: Methods of Genetic Analysis of Mouse; PILE REFERENCE: 3528.1
    CURRENT FILIGE DATE: 2003-11-20
    PRIOR PELICATION NUMBER: 06/427,808
    PRIOR PILING DATE: 2002-11-20
    NUMBER OF SEQ ID NOS: 982914
    SOFTWARE: Microarray Probe Sequence Listing Generator V 1.1
    LENGTH: 25
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Query Match 0.4%; Score 19.2; DB 1; Length 25; Best Local Similarity 87.5%; Pred. No. 3.6e+02; Matches 21; Conservative 0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Length 25;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 MCS-10-719-00-872676

Sequence 872676 Application US/10719900

Sequence 872676 Application US/10719900

PUBLication No. US20050026164A1

GENERAL INFORMATION:

APPLICANT: Xue Mei Zhou

TITLE OF INVENTION: Methods of Genetic Analysis of Mouse

TITLE OF INVENTION: Methods of Genetic Analysis of Mouse

TILLE REFERENCE: 3528.1

CURRENT APPLICATION NUMBER: US/10/719,900

CURRENT FILING DATE: 2003-11-20

PRIOR PILING DATE: 2002-11-20

PRIOR FILING DATE: 2002-11-20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          / Match 0.4%; Score 19.2; DB 1; Local Similarity 87.5%; Pred. No. 3.6e+02; nes 21; Conservative 0; Mismatches 3;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  4599 CATCGTAACTGCTTCTAGAGATGG 4622
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  591 TGCTCCCTCCCAGATCCTTTCTGT 614
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         recrecercanarecriricier 24
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1 carrereacrecricradadaced 24
```

```
ઠે
                                                                                                                                                                                                                                                             ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ö
                                                                                                                                                                                                                                                             Gaps
                                                                                                                                                                                                                                                             ;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               RESULT 464

US-10-719-956-68653

Sequence 68653, Application US/10719956

Publication No. US20040146910A1

GENERAL INFORMATION:
APPLICANT: Xue Mei Zhou

TITLE OF INVENTION: Methods of Genetic Analysis of Rat
FILE REFERENCE: 3527.1

CURRENT APPLICATION NUMBER: US/10/719,956

CURRENT APPLICATION NUMBER: 05/427,836

PRIOR FILING DATE: 2002 11 20

NUMBER OF SEQ ID NOS: 699466

SOFTWARE: Microarray Probe Sequence Listing Generator V 1.1

LENGHIAL 25

"LENGHIAL 25
                                                                                                                                                                                                      Query Match 0.4%; Score 19.2; DB 1; Length 25; Best Local Similarity 87.5%; Pred. No. 3.6e+02; Matches 21; Conservative 0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Query Match 0.4%; Score 19.2; DB 1; Length 25; Best Local Similarity 87.5%; Pred. No. 3.6e+02; Matches 21; Conservative 0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Query Match 0.4%; Score 19.2; DB 1; Length 25; Best Local Similarity 87.5%; Pred. No. 3.6e+02; Matches 21; Conservative 0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           APPLICANT: Xue med zhou
TITLE OF INVENTION: Methods of Genetic Analysis of Mouse
FILE REPERENCE: 35.20
FILE REPERENCE: 35.20
CURRENT APPLICATION NUMBER: US/10/719,900
PRIOR APPLICATION NUMBER: US/427,808
PRIOR FILING DATE: 2003-11.20
NUMBER OF SEQ ID NOS: 982914
SOFTWARE: Microarray Probe Sequence Listing Generator V 1.1
SEQ ID NO 956708
LENGTH: 25
NUMBER OF SEQ ID NOS: 982914
SOFTWARE: Microarray Probe Sequence Listing Generator V 1.1
SEQ ID NO 872676
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1950 ATACATTCTGCCAGGCATAGCCCA 1973
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         4092 AATTICAAGICACIGICAICCTIC 4115
                                                                                                                                                                                                                                                                                                                                                                                                                                 RESULT 463
US-10-719-900-956708/c
Sequence 956708, Application US/10719900
Publication No. US20050026164A1
GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                          591 TGCTCCCTCCCAGATCCTTTCTGT 614
                                                                                                                                                                                                                                                                                                                                                          1 recrecererararecrirerer 24
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1 AATTICATCTAACTGTCATCCTTC 24
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            25 ACACATTCAGCCAGGCAAAGCCCA 2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ; TYPE: DNA
; ORGANISM: Rattus norvegicus
US-10-719-956-68653
                                                                                                       ; TYPE: DNA
; ORGANISM: Mus musculus
US-10-719-900-872676
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CRGANISM: Mus musculus US-10-719-900-956708
                                                                                                                                                                                                                                                                                                                                                     g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ò
```

```
ô
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Gape
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ö
                                              Sequence 369528, Application US/10719956
Publication No. US20040146910A1
Publication No. US20040146910A1
GENERAL INFORMATION:
TITLE OF INVENTION: Methods of Genetic Analysis of Rat
FILE REPERENCE 3527.1
CURRENT FILING DATE: 2003-11-20
PRIOR PPLICATION NUMBER: 60/427,836
PRIOR PPLICATION NUMBER: 60/427,836
PRIOR PPLICATION NUMBER: 60/427,836
PRIOR PLILING DATE: 2002 11-20
NUMBER OF SEQ ID NOS: 699466
SOFTWARE Microarray Probe Sequence Listing Generator V 1.1
LENGTH: 25
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Sequence 467347, Application US/10719956
; Sequence 467347, Application US/10719956
; Publication No. US20040146910A1
; GENERAL INFORMATION:
; APPLICANT: XLE Mel Zhou
; TITLE OF INFORMATION:
; TITLE OF INFORMATION WETHORS of Genetic Analysis of Rat
; TITLE OF INFORMATION NUMBER: US/10/719,956
; CURRENT APPLICATION NUMBER: US/10/719,956
; CURRENT FILING DATE: 2003-11-20
; PRIOR FILING DATE: 2002 11 20
; NUMBER OF SEQ ID NOS: 699466
; SOFTWARE: Microarray Probe Sequence Listing Generator V 1.1
; LENGTH: 25
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Query Match
0.4%; Score 19.2; DB 1; Length 25;
Best Local Similarity 87.5%; Pred. No. 3.6e+02;
Matches 21; Conservative 0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Length 25;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        US-10-719-956-520734/C

Sequence 520734, Application US/10719956

Publication No. US20040146910A1

GENERAL INFORMATION:
TITLE OF INVENTION: Methods of Genetic Analysis of Rat
FITE OF INVENTION: Methods of Genetic Analysis of Rat
FILE REFERENCE: 35.7, 1

CURRENT FILING DATE: 2003-11-20

PRIOR APPLICATION NUMBER: 60/427,836

PRIOR PILING DATE: 2002 11 20

NUMBER OF SEQ ID NOS: 699466
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Query Match 0.4%; Score 19.2; DB 1; Best Local Similarity 87.5%; Pred. No. 3.6e+02; Matches 21; Conservative 0; Mismatches 3;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        4492 AAAGTAGGACCAAGTGATGACACC 4515
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  3829 AGAATTCTAGATCAGAGGAGGAC 3852
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            24 AAATTAGGACCAAGTGGTGACATC 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      25 AAAATTCTAGAACAGAAGGAAGAC 2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ; TYPE: DNA
; ORGANISM: Rattus norvegicus
US-10-719-956-467347
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ORGANISM: Rattus norvegicus US-10-719-956-369528
RESULT 465
US-10-719-956-369528/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       US-10-719-956-467347/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                TYPE: DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   .
Q
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      QQ
```

gibbs-10-667-022-4.rnpb

ö

Gaps

ö

DB 1; Length 19; 2.9e+02;

```
Query Match 0.4%; Score 19; DB Best Local Similarity 100.0%; Pred. No. 2.5 Matches 19; Conservative 0; Mismatches
                                                                                                                                                                                                                                                                                                                                                  5025 AAAAAAAAAAAAAAAA 5043
                                                                                                                                                                                                                                                                                                                                                                                                  AAAAAAAAAAAAAA 19
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AAAAAAAAAAAAAAAA 19
                                                          TYPE: DNA
ORGANISM: Artificial Sequence
FEATURE:
OTHER INFORMATION: Primer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ORGANISM: Artificial Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              19; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      OTHER INFORMATION: Primer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Best Local Similarity
Matches 19; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     US-10-700-884-23/c
                                                                                                                                                                          US-10-913-246-24
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    US-10-934-890-24
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    US-10-934-890-24
     SEQ ID NO 24
LENGTH: 19
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TYPE: DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         FEATURE:
                                LENGTH:
                                                                                                                                                                                                                                                                                                                                                                                                     요
                                                                                                                                                                                                                                                                                                                                                  8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  g
                                                                                                                                                                                                                                                                                                                                                                                                                                                 RESULT 468

US-10-760-940.1/C

i Sequence 1, Application US/10760940

i Publication No. UG2004019577A1

i GENERAL INFORMATION:

APPLICANT: Mancharan, Muthiah

APPLICANT: Capaldi, Daniel C.

APPLICANT: Capaldi, Daniel C.

APPLICANT: Cole, Douglas L.

APPLICANT: Guzaev, Andrei

i APPLICANT: Guzaev, Andrei

i TITLE OF INVENTION: IMPROVED PROCESS FOR THE SYNTHESIS OF OLIGOMERIC COMPOUNDS

I TITLE OF INVENTION: INDER: 2004-01-20

CURRENT APPLICATION NUMBER: US/10/760,940

CURRENT PILING DATE: 2004-01-20

PRIOR PILING DATE: 1999-04-09

PRIOR PILING DATE: 1999-04-09
                                                                                                                                                                                                                                                                   ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Gaps
                                                                                                                                                                                                                                                                   Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        .;
0
                                                                                                                                                                                                                                                                   .
0
                                                                                                                                                                                                     Score 19.2; DB 1; Length 25;
Pred. No. 3.6e+02;
0; Mismatches 3; Indels
SOFTWARE: Microarray Probe Sequence Listing Generator V 1.1
SEQ ID NO 520734
LENGTH: 25
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Query Match 0.4%; Score 19; DB 1; Length 19; Best Local Similarity 100.0%; Pred. No. 2.9e+02; Matches 19; Conservative 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         GENERAL INFORMATION:
APPLICANT: Kurn, Nurith
TITLE OF INVENTION: AMPLIETCATION OF RNA SEQUENCES;
TITLE OF INVENTION: AMPLIETCATION OF RNA SEQUENCES;
FILE REFERENCE: 492692000500
CURRENT APPLICATION NUMBER: US/10/913,246
CURRENT FILING DATE: 2004-08-05;
PRIOR APPLICATION NUMBER: US/10/100,321
PRIOR APPLICATION NUMBER: US 60/274,550
PRIOR FILING DATE: 2001-03-09;
NUMBER OF SEQ ID NOS: 25;
NUMBER OF SEQ ID NOS: 25
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ) OTHER INFORMATION: Synthetic Construct US-10-760-940-1
                                                                                                                                                                                                                                                                                                                     838 TCAGAAAAGCATCTGAGAAAGCA 861
                                                                                                                                                                                                                                                                                                                                                                       25 TCAGAAAAGCATATGAGCAAACA 2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Sequence 24, Application US/10913246
Publication No. US20050003441A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             5025 AAAAAAAAAAAAAAAA 5043
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     19 AAAAAAAAAAAAAAA 1
                                                                                                                                                                                                        Query Match
Best Local Similarity 87.5%;
Matches 21; Conservative C
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TYPE: DNA ORGANISM: Artificial Sequence
                                                                                        ; TYPE: DNA
; ORGANISM: Rattus norvegicus
US-10-719-956-520734
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     US-10-913-246-24
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   SEQ ID NO 1
LENGTH: 19
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     RESULT 469
                                                                                                                                                                                                                                                                                                                        ò
                                                                                                                                                                                                                                                                                                                                                                             셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  엄
```

```
APPLICANT: Baker, Brenda F.
APPLICANT: Baker, Muchiah
APPLICANT: Bandbaran, Muthiah
APPLICANT: Manoharan, Muthiah
APPLICANT: Batchard
APPLICANT: Griffey, Richard
APPLICANT: Sayze, Eric E.
APPLICANT: Sayze, Eric E.
APPLICANT: Prakash, Thazha F.
APPLICANT: Rajeev, Kallanthottathil G.
APPLICANT: Rajeev, Kallanthottathil G.
APPLICANT: Rajeev, Mallanthottathil G.
APPLICANT: Rajeev, Stallanthottathil G.
APPLICANT: Rajeev, Rajeev
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    0.4%; Score 19; DB 1; Length 19; 100.0%; Pred. No. 2.9e+02; tive 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                    TITLE OF INVENTION: METHODS AND COMPOSITIONS FOR TITLE OF INVENTION: METHODS AND COMPOSITIONS FOR TITLE OF INVENTION: METHODS AND COMPOSITIONS FOR FILE REPERENCE: 492692000500 CURRENT APPLICATION NUMBER: US/10/934,890 CURRENT FILING DATE: 2004-09-03 PRIOR APPLICATION NUMBER: US/10/100,321 PRIOR FILING DATE: 2002-03-11 PRIOR FILING DATE: 2001-03-09 NUMBER OF SEQ ID NOS: 25 NUMBER OF SEQ ID NOS: 25 SEQ ID NOS: 26 SEQ ID NOS: 26 SEQ ID NOS: 27 SEQ ID NOS: 27 SEQ ID NOS: 28 SEQ ID NOS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CURRENT APPLICATION NUMBER: US/10/700,884
CURRENT FILING DATE: 2003-11-04
PRIOR APPLICATION NUMBER: US 10/635,380
PRIOR FILING DATE: 2003-08-06
PRIOR APPLICATION NUMBER: US 60/423,760
Sequence 24, Application US/10934890
Publication No. US20050014192A1
GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Sequence 23, Application US/10700884 Publication No. US20050118605A9 GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     5025 AAAAAAAAAAAAAAA 5043
```

```
GENERAL INFORMATION:
APPLICANT: Lipoveek, Daea
APPLICANT: Lipoveek, Daea
APPLICANT: Kuimelis, Robert G
TITLE APPLICANT: Kuimelis, Robert G
TITLE OF INVENTION: PROTEIN SCAFFOLDS FOR ANTIBODY MIMICS
TITLE OF INVENTION: AND OTHER BINDING PROTEINS
FILE REFERENCE: 50036/02104
CURRENT FILING DATE: 2003-12-03
PRIOR FILING DATE: 2003-12-03
PRIOR FILING DATE: 1998-12-10
PRIOR FILING DATE: 1998-12-10
PRIOR FILING DATE: 1998-12-09
PRIOR FILING DATE: 1998-12-09
PRIOR FILING DATE: 2000-02-29
NUMBER OF SEQ ID NOS: 202
SOFTWARE: FREEESQ for Windows Version 4.0
SEQ ID NO 14
LENGTH: 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Query Match 0.4%; Score 19; DB 1; Length 20; Best Local Similarity 100.0%; Pred. No. 3.1e+02; Matches 19; Conservative 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ; OTHER INFORMATION: Puromycin linker oligonucleotide US-10-728-078-14
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               5047 AAAAAAAAAAAAAAAC 5065
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TYPE: DNA ORGANISM: Artificial Sequence
          Publication No. US20050038229A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   US-10-620-642-33/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         RESULT 474
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         APPLICANT: Mancharan, Muthia
APPLICANT: Capaldi, Daniel
APPLICANT: Capaldi, Daniel
APPLICANT: Capaldi, Daniel
APPLICANT: Cole, Douglas
APPLICANT: Cole, Douglas
APPLICANT: Guzaev, Andrei
TITLE OF INVENTION: Improved Process for the Synthesis of Oligomeric Compounds
FILE REFERENCE: ISIS330
CURRENT APPLICATION NUMBER: US/10/940,360
CURRENT PILING DATE: 1999-04-09-14
PRIOR FILING DATE: 1999-04-09
PRIOR FILING DATE: 1999-04-09
PRIOR FILING DATE: 1999-04-09
NUMBER OF SEQ ID NOS: 7
SOFTWARE: Patentin version 3.0
SEQ ID NO 1
LENGTH: 19
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ô
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                   NAME/KGY: misc_feature

1. LOCATION: (16)...(19)

1. OTHER INFORMATION: 2'-O-[2-(methoxy)ethyl]-2-thio-5-methyluridine

VS-10-700-884-23
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Query Match 0.4%; Score 19; DB 1; Length 19; Best Local Similarity 100.0%; Pred. No. 2.9e+02; Matches 19; Conservative 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Query Match 0.4%; Score 19; DB 1; Length 19; Best Local Similarity 100.0%; Pred. No. 2.9e+02; Matches 19; Conservative 0; Mismatches 0; Indels
PRIOR FILING DATE: 2002-11-05
PRIOR APPLICATION NUMBER: US 10/078,949
PRIOR FILING DATE: 2002-20-20
PRIOR FILING DATE: 2002-20-20
PRIOR PLING DATE: 2000-01-07
PRIOR APPLICATION NUMBER: US 08/479,783
PRIOR APPLICATION NUMBER: US 08/659,440
PRIOR FILING DATE: 1997-06-06
NUMBER OF SEQ ID NOS: 23
SOFTWARE: Patentin version 3.3
SEQ ID NO 23
LENGTH: 19
                                                                                                                                                                                                                                                                                                                                                                                                          OTHER INFORMATION: Synthetic Construct
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     5025 AAAAAAAAAAAAAAA 5043
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    5025 AAAAAAAAAAAAAAA 5043
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ; Sequence 14, Application US/10728078
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Sequence 1, Application US/10940360; Publication No. US20050137391A1; GENERAL INFORMATION: APPLICANT: RAVIkumar, Vasulinga
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ) OTHER INFORMATION: Novel Sequence US-10-940-360-1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       19 AAAAAAAAAAAAAAA 1
                                                                                                                                                                                                                                                                                                                                 TYPE: DNA
ORGANISM: Artificial
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TYPE: DNA
ORGANISM: Artificial
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           RESULT 473
US-10-728-078-14
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                13
                                                                                                                                                                                                                                                                                                                                                                                                                                    FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                   FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ઠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             임
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ઠ
```

```
ADDRESSEE: Marshall, O'Toole, Gerstein, Murray & Borun STREET: 6300 Sears Tower, 233 South Wacker Drive CITY: Chicago
                                                                                                                                                                                                                                                                                                                                                                       STATE: Illinois
COUNTRY: United States of America
ZIP: 60606 ED COMPUTER: United States of America
COMPUTER: READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC Comparatible
OPEATING SYSTEM: PC-DOS/MS-DOS
OPEATING SYSTEM: RC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.30
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CURRENT APPLICATION DATA:

APPLICATION NUMBER: US/10/620,642
FILING DATE: 16-011-2003
CLASSIFICATION: «Unknown»
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US/10/175,608
FILING DATE: 16-02-2002
APPLICATION NUMBER: 09/486,549
FILING DATE: 07-AUG-2000
APPLICATION NUMBER: 09/486,546
                                                                                                           Bosselman, Robert A.
Suggs, Sidney V.
Martin, Francis H.
TITLE OF INVENTION: Stem Cell Factor
NUMBER OF SEQUENCES: 104
CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 FILING DATE: 24-MAY-1995
APPLICATION NUMBER: 08/172,329
FILING DATE: 21-DEC-1993
sequence 33, Application US/10620642
Publication No. US20050080250A1
GENERAL INFORMATION:
APPLICANT: Zeebo, Krisztina M.
```

```
Best Local Similarity 100.0
Matches 19; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ; ORGANISM: Mus musculus
US-10-719-900-642313
SEQ ID NO 29731
LENGTH: 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     JS-10-469-881-15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      US-10-469-881-15
                                                                                                                                                                                                                                       Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ठ
                                                                                                                                                                                                                                                                                                                                                      ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               APPLICANT: Sampath, Rangaraian
APPLICANT: Sampath, Rangaraian
APPLICANT: Sampath, Rangaraian
APPLICANT: Freier, Susan M.
APPLICANT: Hassire, Christian
APPLICANT: Hofstadler, Steven A.
APPLICANT: Hofstadler, Steven A.
APPLICANT: Bonnet, Creven A.
APPLICANT: Baker, Brid
APPLICANT: Bonnett, C. Frank
TITLE OF INVENTION: Acute Respiratory Syndrome (SARS)
FILE REFERENCE: ISISO083-100 (BIOL0008US)
CURRENT APPLICATION NUMBER: US/10/831,901A
CURRENT APPLICATION NUMBER: 60/466,426
PRIOR PILING DATE: 2003-04-28
PRIOR PILING DATE: 2003-05-06
PRIOR PILING DATE: 2003-05-06
PRIOR PILING DATE: 2003-05-06
PRIOR PILING DATE: 2003-06-10
PRIOR PILING DATE: 2003-06-10
PRIOR PILING DATE: 2003-06-10
PRIOR PILING DATE: 2003-06-10
PRIOR FILING DATE: 2003-06-10
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Query Match 0.4%; Score 19; DB 1; Length 20; Best Local Similarity 100.0%; Pred. No. 3.1e+02; Matches 19; Conservative 0; Mismatches 0; Indels
                                                                                                                                                                                                         FILING DATE: 24-AUG-1990
APPLICATION NUMBER: 07/537,198
FILING DATE: 11-JUN-1990
APPLICATION NUMBER: 07/422,383
FILING DATE: 16-OCT-1989
ATTORNEY/AGENT INFORMATION
REGISTRATION NUMBER: 36,107
REFERENCE/DOCKET NUMBER: 36,107
TELECOMMUNICATION INFORMATION:
TELECOMMUNICATION INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TELEX: «Unknown»;

INFORMATION FOR SEQ ID NO: 33:
SEQUENCE CHARACTERISTICS:
LENGTH: 20 base pairs
TYPE: nucleic acid
STRANDEDNESS: single
TOPOLOGY: linear
MOLECULE TYPE: DNA
SEQUENCE DESCRIPTION: SEQ ID NO: 33:
US-10-620-642-33
                                       PILING DATE: 25-NOV-1992
APPLICATION NUMBER: 07/684,535
FILING DATE: 10-APR-1991
APPLICATION NUMBER: 09/589,701
FILING DATE: 10-0CT-1991
APPLICATION NUMBER: 07/573,616
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Sequence 29731, Application US/10831901A
Sequence 29731, Application US/10831901A
GENERAL INFORMATION:
GENERAL INFORMATION:
APPLICANT: Ecker, David J.
APPLICANT: Sampath, Rangarajan
APPLICANT: Freier, Susan M.
APPLICANT: Hofereder, Christian
APPLICANT: Hoferedler, Steven A.
APPLICANT: Lowery, Kristin Sannes
APPLICANT: Swayze, Eric
               APPLICATION NUMBER: 07/982,255
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 5024 TAAAAAAAAAAAAAA 5042
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       19 TAAAAAAAAAAAAAA 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            US-10-831-901A-29731/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ð
```

```
OTHER INFORMATION: Synthetic nucleic acid sequence linking the promoter to the codin OTHER INFORMATION: g region
                                                                                                                                             ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Gaps
                                                                                                                                               Gaps
                                                                                                                                               .
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ; Sequence 15, Application US/10469881
; bublication No. US20040171824A1
; bublication No. US20040171824A1
; GENERAL INFORMYTION:
; APPLICANT: The University of virginia Patent Foundation
; APPLICANT: The University of virginia Patent Foundation
; APPLICANT: Scrable, Heidi J
APPLICANT: Cronin, Carolyn A
; TITLE OF INVENITION: A Lac Operator-Repressor System
; FILE REFERENCE: 00663-02
; CURRENT APPLICATION NUMBER: US/10/469,881
; CURRENT FILING DATE: 2003-09-04
; PRIOR FILING DATE: 2001-04-04
; PRIOR FILING DATE: 2001-04-04
; PRIOR FILING DATE: 2001-03-05
; NUMBER OF SEQ. ID NOS: 20
; SOFTWARE: Patentin version 3.1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Query Match 0.4%; Score 19; DB 1; Length 25; Best Local Similarity 100.0%; Pred. No. 3.88+02; Matches 19; Conservative 0; Mismatches 0; Indels
                                                                                                       Length 20;
                                                                                                                                               0; Indels
                                                                                                           DB 1; Le
3.1e+02;
                                                                                                         0.4%; Score 19; DB 100.0%; Pred. No. 3.1 Live 0; Mismatches
                               ; FEATURE:
; OTHER INFORMATION: Antisense compound
US-10-831-901A-29731
                                                                                                                                                                                     5025 AAAAAAAAAAAAAAAA 5043
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       7 CCCCGGGCTGCAGGAATTC 25
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               6 CCCCGGGCTGCAGGAATTC 24
                                                                                                                                                                                                                         19 AAAAAAAAAAAAAAA 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TYPE: DNA ORGANISM: Artificial Sequence
TYPE: DNA ORGANISM: Artificial Sequence
```

```
Best Local Similarity 90.9
Matches 20; Conservative
                                                                                                                                                                                                                                                            ORGANISM: Mus musculus US-10-719-900-899255
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ; TYPE: DNA
; ORGANISM: Mus musculus
US-10-719-900-899256
                                                                                                                                                                                                                                                                                                                             Best Local Similarity
Matches 20; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           US-10-809-189-82442
                                                                                                                                                                                                                                                                                                               Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Query Match
                                                                                                                                                                                                                                                                                                                                                                                                             셤
                                                                                                                                                                                                                                                                                                                                                                              ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ö
                                 ö
                                 Gaps
                                 ö
                                                                                                                                                          Sequence 516700. Application US/10719900
; Bublication No. US20050026164A1
; GENERAL INFORMATION:
; APPLICANT: Xue Mei Zhou
; TITLE OP INVENTION: Methods of Genetic Analysis of Mouse
; TITLE OP INVENTION: Methods of Genetic Analysis of Mouse
; TITLE OP INVENTION: Methods of Genetic Analysis of Mouse
; FILE REFERENCE: 3528.
; CURRENT APPLICATION NUMBER: US/10/719,900
; CURRENT APPLICATION NUMBER: 00/427,808
; PRIOR APPLICATION NUMBER: 2002 11 20
; NUMBER OF SEQ ID NOS: 982914
; SEQ ID NO 516700
; LENGTH: 25
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           0.4%; Score 18.8; DB 1; Length 22; 90.9%; Pred. No. 3.5e+02; tive 0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         0.4%; Score 18.8; DB 1; Length 25; 90.9%; Pred. No. 3.9e+02;
   Length 25;
                                 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           2; Indels
Query Match 0.4%; Score 19; DB 1; Lu
Best Local Similarity 100.0%; Pred. No. 3.8e+02;
Matches 19; Conservative 0; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             OTHER INFORMATION: Synthetic Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            5025 AAAAAAAAAAAAAAAAAA 5046
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1902 TGCTCTCGTCAAAGAGGTTCCT 1923
                                                                2132 CAAATGGAAATTATGACAC 2150
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          22 AAAAACAAAAAAAAAA 1
                                                                                   21 CAAATGGAAATTATGACAC 3
                                                                                                                                                                                                                                                                                                                                                                                                                                                         TYPE: DNA
ORGANISM: Artificial Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           20, Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ; ORGANISM: Mus musculus
US-10-719-900-516700
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           RESULT 479
US-10-719-900-516700
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         20;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           US-10-831-778-61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       g
                                                                                               g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ઠે
```

```
198-10-719-900-8999255/C

198-10-719-900-8999255/C

198-10-719-900-8999255/C

198-10-719-900-8999255/C

198-10-719-900-8999255/C

198-10-719-900-899925/C

198-10-89925/C

198-10-719-900-899925/C

198-10-719-900-89925/C

198-10
```

RESULT 480

Gaps

; 0

Length 25; Indels

```
0.4%; Score 18.8; DB 1;
90.9%; Pred. No. 3.9e+02;
tive 0; Mismatches 2;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           US-10-719-956-185866

'Sequence 185866, Application US/10719956

'Publication No. US20040146910A1

'GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1690 CTGGTTATCTTGGTATCTGTTA 1711
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Sequence 63115, Application US/10681773; Publication No. US20040146890A1; GENERAL INFORMATION: APPLICANT: MATSUZAKI, Hajime
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 2138 GAAATTATGACACAGAGCTCCA 2159
                                                                                                                                                                                                                                                                                      4096 TCAAGTCACTGTCATCCTTCCA 4117
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      GABATTTTGACACAGAGCTACA 22
                                                                                                                                                                                                                                                                                                                                                           1 TAAAGTCACTGTTATCCTTCCA 22
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ORGANISM: Rattus norvegicus US-10-719-956-185866
                                                                                                                                             Query Match 0.4%
Best Local Similarity 90.9%
Matches 20; Conservative
; TYPE: DNA; CORGANISM: mus musculus US-10-809-189-119803
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 , ORGANISM: Homo sapien
US-10-681-773-63115
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                US-10-681-773-63115
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      q
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ઠે
                                                                                                                                                                                                                                                                                                                                                                   g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ;
0
                                                                                                                                                                                                                                                                                                                                                                                                                ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ö
                                                                                                                                                                                                                                                                                                                                                                                                                ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               0.4%; Score 18.8; DB 1; Length 25; 90.9%; Pred. No. 3.9e+02; tive 0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                Query Match

0.4%; Score 18.8; DB 1; Length 25;
Best Local Similarity 90.9%; Pred. No. 3.9e+02;
Matches 20; Conservative 0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         US-10-809-189-108648

US-10-809-189-108648

Sequence 108648, Application US/10809189

Publication No. US20050048531A1

GENERAL INFORMATION:
APPLICANT: Michael Mittmann
APPLICANT: David Mack
APPLICANT: David Lockhart
APPLICANT: David Lockhart
APPLICANT: David Lockhart
APPLICANT: AFFWERTIX, Inc.
TITLE OF INVENTION: Methods of Genetic Analysis
FILE REFERENCE: 3101.1
CURRENT APPLICATION NUMBER: US/09/396,196
PRIOR APPLICATION NUMBER: US/09/396,196
PRIOR PILING DATE: 1999-09-15
PRIOR PILING DATE: 1999-09-15
NUMBER OF SEQ ID NOS: 127806

SOFTWARE: FastSEQ for Windows Version 4.0
SEQ ID NO 108648

LENGTH: 25

LENGTH: 25

LENGTH: 25

LENGTH: 25

LENGTH: 25
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Costrong and a paper of the pap
PRIOR FILING DATE: 1998-09-17
NUMBER OF SEQ ID NOS: 127806
SOFTWARE: FastSEQ for Windows Version 4.0
SEQ ID NO 84442
LENGTH: 25
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           266 TCTTTAGCGTGGCTTCTTCTCT 287
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             191 GAGGCCCGGGAACGCATGTCCC 212
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            4 rerradecerecerrerer 25
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              caccicrocaaccicarcircc 22
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Query Match
Best Local Similarity 90.9
Matches 20; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ; ORGANISM: mus musculus US-10-809-189-108648
                                                                                                                                                                                                                                     ; ORGANISM: mus musculus
US-10-809-189-82442
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 US-10-809-189-119803
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TYPE: DNA ORGANISM:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     g
```

```
ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Gaps
APPLICANT: Mei, Rui
APPLICANT: Sena, Mei, Mei
APPLICANT: Kennedy, Giulia
TITLE OF INVENTION: Methods for Genotyping Polymorphisms in Humans
TITLE OF INVENTION: Methods for Genotyping Polymorphisms in Humans
FILE REFERENCE: 352.2
CURRENT APPLICATION NUMBER: US/10/681,773
CURRENT FILING DATE: 2002-05-14
PRIOR APPLICATION NUMBER: 60/470,475
PRIOR FILING DATE: 2002-05-14
PRIOR APPLICATION NUMBER: 60/417,190
PRIOR APPLICATION NUMBER: 60/417,190
PRIOR FILING DATE: 2002-10-08
NUMBER OF SEQ ID NOS: 124031
SOFTWARE: Microarray Probe Sequence Listing Generator V 1.1
LENGTH: 25
LENGTH: 25
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Query Match 0.4%; Score 18.8; DB 1; Length 25; Best Local Similarity 90.9%; Pred. No. 3.9e+02; Matches 20; Conservative 0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Query Match
0.4%; Score 18.8; DB 1; Length 25;
Best Local Similarity 90.9%; Pred. No. 3.9e+02;
Matches 20; Conservative 0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TITLE OF INVENTION: Methods of Genetic Analysis of Rat FILLE REPERENCE: 3527.

FILLE REPERENCE: 3527.

CURRENT APPLICATION NUMBER: US/10/719,956

CURRENT FILING DATE: 2003-11-20

PRIOR APPLICATION NUMBER: 60/427,836

PRIOR FILING DATE: 2002 11 20

NUMBER OF SEQ ID NOS: 699466

SOFTWARE: Microarray Probe Sequence Listing Generator V 1.1

SEQ ID NO 185866

LENGTH: 25
```

Gapa

ö

IndelB

```
NUMBER OF SEQ ID NOS: 699466
SOFTWARE: Microarray Probe Sequence Listing Generator V 1.1
SEQ ID NO 643654
LENGTH: 25
                                                                                                                                                                                                                                                                                           Score 18.8; DB 1;
Pred. No. 3.9e+02;
0; Mismatches 2;
                                                                                                                                                                                                                                                                                                                                                                                                                                                  848 CATCTGAGAAAGCAGCTATGCT 869
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        25 carcreagacagacirarecr 4
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ORGANISM: Artificial Sequence
                                                                                                                                                                                                                                                                                               Query Match 0.4%;
Best Local Similarity 90.9%;
Matches 20; Conservative
                                                                                                                                                   ; TYPE: DNA
; ORGANISM: Rattus norvegicus
US-10-719-956-643654
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               RESULT 491
US-10-374-366-201
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ద
                                                                                                                                                                                                                                                                                                                                                                                                                                                          ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ô
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            RESULT 488
US-10-719-956-643653/C
; Sequence 643653, Application US/10719956
; Publication No. US20040146910A1
; GENERAL INFORMATION:
   APPLICANT: Xue Mei Zhou
; TITLE OF INVENTION: Methods of Genetic Analysis of Rat
; TITLE PEPERENCE: 3527.1
; CURRENT FILING DATE: 2003-11-20
; PRIOR APPLICATION NUMBER: 60/427,836
; PRIOR FILING DATE: 2002 11.20
; NUMBER OF SEQ ID NOS: 699466
; CONTROL OF THE CONTROL OF THE
                                                                                                                                   US-10-719-956-455343, Application US/10719956
; Publication No. US20040146910A1
; GENERAL INFORMATION:
; APPLICANT: Xue Mei Zhou
; TITLE OF INVENTION: Methods of Genetic Analysis of Rat
; FILE REFERENCE: 3527.1
; CURRENT APPLICATION NUMBER: US/10/719,956
; CURRENT FILING DATE: 2003-11-20
; PRIOR APPLICATION NUMBER: 60/427,836
; PRIOR FILING DATE: 2002 11 20
; NUMBER OF SEQ ID NOS: 699466
; SOFTWARE MICROARRY PROBE Sequence Listing Generator V 1.1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Length 25;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             0.4%; Score 18.8; DB 1; Length 25; 90.9%; Pred. No. 3.9e+02; tive 0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Sequence 643654, Application US/10719956
Publication No. US20040146910A1
GENERAL INFORMATION:
APPLICANT: XUE Mei
TITLE OF INVENTION: Methods of Genetic Analysis of Rat
FILE REFERENCE: 3527.1
CURRENT APPLICATION NUMBER: US/10/719,956
CURRENT FILING DATE: 2003-11-20
PRIOR PRIOR PILING DATE: 2002-11 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Score 18.8; DB 1;
Pred. No. 3.9e+02;
0; Mismatches 2;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     644 TTGAATATGATAAAAGCCTGGG 665
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 848 CATCTGAGAAAGCAGCTATGCT 869
CTGCTTATCTTGGCATCTGTTA 24
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CATCTGAGACAGTAGCTATGCT 4
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           25 ragaaraagaraaagccreeg 4
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Query Match
Best Local Similarity 90.9%;
Matches 20; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ; TYPE: DNA
; ORGANISM: Rattus norvegicus
US-10-719-956-643653
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ; TYPE: DNA; ORGANISM: Rattus norvegicus
US-10-719-956-455343
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       20; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   RESULT 489
US-10-719-956-643654/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 SEQ ID NO 455343
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    SEQ ID. NO 643653
셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   용
```

```
APPLICANT: Crooke, Stanley T.
APPLICANT: Ecker, David J.
APPLICANT: Ecker, David J.
APPLICANT: Ecker, David J.
APPLICANT: Ecker, David J.
APPLICANT: Sampath, Rangarajan
APPLICANT: Massire, Christian
APPLICANT: Massire, Christian
APPLICANT: Massire, Christian
APPLICANT: Massire, Christian
APPLICANT: Lowery, Kristin Sannes
APPLICANT: Baker, Brenda F.
APPLICANT: Baker, Brenda F.
APPLICANT: Compositions And Methods For The Treatment Of Severe
ITILE OF INVENTION: Compositions And Methods For The Treatment Of Severe
ITILE OF INVENTION: Compositions (SARS)
FILE REFERENCE: ISISO083-100 (BIOL000803)
CURRENT FILING DATE: 2003-04-28
PRIOR FILING DATE: 2003-05-06
PRIOR APPLICATION NUMBER: 60/468,562
PRIOR APPLICATION NUMBER: 60/468,562
PRIOR APPLICATION NUMBER: 60/468,562
PRIOR APPLICATION NUMBER: 60/468,503
PRIOR PLING DATE: 2003-06-10
PRIOR PLING DATE: 2003-06-10
PRIOR PLING DATE: 2003-06-10
PRIOR PLING DATE: 2003-06-27
NUMBER OF SEQ ID NOS: 30063
SOFTWARE: PastSEQ for Windows Version 4.0
LENGTH: 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           IndelB
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Query Match 0.4%; Score 18.4; DB 1; Best Local Similarity 95.0%; Pred. No. 3.4e+02; Matches 19; Conservative 0; Mismatches 1;
US-10-831-901A-29730/c
; Sequence 29730, Application US/10831901A
; Publication No. US20050100885A1
; GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ; OTHER INFORMATION: Antisense compound US-10-831-901A-29730
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ; Sequence 201, Application US/10374366
; Publication No. US20040014085A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         5025 AAAAAAAAAAAAAAAA 5044
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        20 ACAAAAAAAAAAAAAAAA 1
```

```
SEQ ID NO 939
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 RESULT 495
                                                                                                                                                                                                                                                                           ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ઠે
                                                                                                                                                                                                                                                                                                                      셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Sequence 23, Application US/10849072
Sequence 23, Application US/10849072
Publication No. US20040214221A1
GENERAL INFORMATION:
APPLICANT: Roche Diagnostics GmbH
TITLE OF INVENTION: High density labeling of DNA with modified or
TITLE OF INVENTION: "chromophore" carrying nucleotides and DNA polymerases
TITLE OF INVENTION: used
FILE REFERENCE: 4780/00/MO
CURRENT APPLICATION NUMBER: US/10/849,072
CURRENT PILING DATE: 2004-05-19
NUMBER OF SEQ ID NOS: 26
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                          ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             MESSUL 1927

Sequence 21, Application US/10849072

Sequence 21, Application US/10849072

Sequence 21, Application US/10849072

Sequence 21, Application US/10849072

Publication No. US2004021421A1

GENERAL INFORMATION:

APPLICANT: Roche Diagnostics GmbH

TITLE OF INVENTION: "chromophore" carrying nucleotides and DNA polymerases

TITLE OF INVENTION: "chromophore" carrying nucleotides and DNA polymerases

TITLE OF INVENTION: UMBER: US/10/WO

CURRENT APPLICATION NUMBER: US/10/849,072

CURRENT FILING DATE: 204-05-19

NUMBER OF SEQ ID NOS: 26

SOFUTHOR OF SEQ ID NOS: 26

SOFUTHOR OF SEQ ID NOS: 26

SEQ ID NO 21

LENGTH: 18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                          Gaps
        TITLE OF INVENTION: METHOD FOR THE RECOMBINATION OF GENETIC ELEMENTS TITLE OF INVENTION: METHOD FOR THE RECOMBINATION OF GENETIC ELEMENTS FILE REFRENCE: CLi1794 US NA CURRENT APPLICATION NUMBER: US/10/374,366 CURRENT FILING DATE: 2003-02-26 PRIOR FILING DATE: 2003-02-26 NUMBER OF SEQ ID NOS: 203 SOFTWARE: PARCHIN VERSION 3.2 SOFTWARE: PARCHIN VERSION 3.2 SEQ ID NO 201
LENGTH: 24
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                          ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CTHER INFORMATION: Description of Artificial Sequence: second CTHER INFORMATION: fragment of SEQ ID NO: 6
US-10-849-072-21
                                                                                                                                                                                                                                                                                                                                                                                                  y Match 0.4%; Score 18.4; DB 1; Length 24; Local Similarity 95.0%; Pred. No. 4e+02; hes 19; Conservative 0; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Query Match 0.4%; Score 18; DB 1; Length 18; Best Local Similarity 100.0%; Pred. No. 3.3e+02; Matches 18; Conservative 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              5063 AACTCGAGGGGGGCCCGGT 5082
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             5025 AAAAAAAAAAAAAA 5042
                                                                                                                                                                                                                                                                                                           TYPE: DNA
CRGANISM: Rhodosporidium glutinis
US-10-374-366-201
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 5 Agcrccaaccccccccc 24
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1 AAAAAAAAAAAAAA 18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ORGANISM: Artificial Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          SOFTWARE: Patentin Ver. 2.1
SEQ ID NO 23
LENGTH: 18
APPLICANT: Tang, Xiao-Song
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    US-10-849-072-23/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TYPE: DNA
                                                                                                                                                                                                                                                                                                                                                                                                               Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  RESULT 492
                                                                                                                                                                                                                                                                                                                                                                                                                                                                Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                          Best
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 셤
```

```
ö
                                                                                                                                                                                                                                  ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Gaps
                                                                                                                                                                                                                                       Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ö
                                                                                                                                                                                                                                                                                                                                                                                                            US-10-831-778-913/C
US-10-831-778-913/C
Sequence 913, Application US/10831778
Sequence 913, Application US/10831778
Sequence 913, Application Wo. US2040235774A1
GENERAL INFORMATION:
APPLICANT: Bratzler, Robert L.
APPLICANT: Fouron, Vess
TITLE OF INVENTION: Immunostimulatory Nucleic Acids for the
TITLE OF INVENTION: Immunostimulatory Nucleic Acids for the
TITLE OF INVENTION: Tradement of Asthma and Allergy
FILE REFERENCE: 01037/7013 (HCL/MAT)
CURRENT APPLICATION NUMBER: US/10/831,778
FILE REPRING DATE: 2000-04-023
FRIOR PILING DATE: 2000-02-03
FRIOR FILING DATE: 2000-02-03
NUMBER OF SEQ ID NOS: 1093
SOFTWARE: FastSEQ for Windows Version 3.0
SEQ ID NO 913
LENGTH: 18
                                                                                                                                                                                                                                       ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Sequence 939, Application US/10831778
; Sequence 939, Application US/204023574A1
; Publication No. US2004023574A1
; GENERAL INFORMATION:
; APPLICANT: Bratzler, Robert L.
; APPLICANT: Fouron, Yves
; TITLE OF INVENTION: Immunostimulatory Nucleic Acids for the TITLE OF INVENTION: Treatment of Asthma and Allergy
; TITLE OF INVENTION: Treatment of Asthma and Allergy
; FILE REFERENCE: C1037/7013 (HCL/MAT)
; CURRENT APPLICATION NUMBER: US/10/831,778
; CURRENT FILING DATE: 2004-04-23
; PRIOR APPLICATION NUMBER: US 60/179,991
; PRIOR PILING DATE: 2000-02-03
; NUMBER OF SEQ ID NOS: 1093
; SOFTWARE FastSEQ for Windows Version 3.0
; TYPE: DNA; ORGANISM: Artificial Sequence; FEATURE: , OTHER INFORMATION: Description of Artificial Sequence: second; OTHER INFORMATION: fragment of SEQ ID NO: 6
US-10-849-072-23
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Length 18;
                                                                                                                                                                            Query Match 0.4%; Score 18; DB 1; Length 18; Best Local Similarity 100.0%; Pred. No. 3.3e+02; Matches 18; Conservative 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       DB 1; Le
. 3.3e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       0.4%; Score 18; DB illarity 100.0%; Pred. No. 3.3 Conservative 0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                OTHER INFORMATION: Synthetic Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CTHER INFORMATION: Synthetic Sequence US-10-831-778-913
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   5025 AAAAAAAAAAAAAA 5042
                                                                                                                                                                                                                                                                                                5025 AAAAAAAAAAAAAA 5042
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     18 дададададададада 1
                                                                                                                                                                                                                                                                                                                                                   18 АААААААААААААА 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TYPE: DNA ORGANISM: Artificial Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TYPE: DNA ORGANISM: Artificial Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Query Match
Best Local Similarity
....hes 18; Conserva
```

Gapa

ö

ð g

```
; OTHER INFORMATION: this sequence may encompass 12-18 nucleotides according to the ; OTHER INFORMATION: specification as filed US-10-776-917-141
                                                                                                                                                                                                                                                                                                                                                                                                 APPLICANT: THRUSH, ADAIRDY
APPLICANT: THRUSH, CHARLOTTE ALBAEK
APPLICANT: THRUSH, MAJKEN
APPLICANT: WESTERGAARD, MAJKEN
APPLICANT: WESTERGAARD, MAMOIT
TILLE OF INVENTION: OLIGOMERIC COMPOUNDS FOR THE MODULATION OF RAS EXPRESSION
FILE REPERENCE: 56609 (71432)
CURRENT APPLICATION NUMBER: US/10/776,917
CURRENT PILING DATE: 2004-02-10
PRIOR PELING DATE: 2003-0-10
PRIOR PELING DATE: 2003-0-10
PRIOR FILING DATE: 2003-0-10
PRIOR FILING DATE: 2003-0-10
PRIOR FILING DATE: 2003-10-20
SHOWBER OF SEQ ID NOS: 201
SEQ ID NO 141
LENGTH: 18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Sequence 9, Application US/10766096
Publication No. US20040265786A1
GENERAL INFORMATION:
APPLICANT: Lin, Ching-I Patsy
Wallace, Robert Bruce
Coseman, Jeffrey
French, Cynthial
TITLE OF INVENTION: Lyophilization of Cultured Human Cells
     Query Match 0.4%; Score 18; DB 1; Length 18; Best Local Similarity 100.0%; Pred. No. 3.3e+02; Matches 18; Conservative 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     DB 1; Length 18; 3.3e+02; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.30
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CORRESPONDENCE ADDRESS:
ADDRESSEE: Townsend and Townsend and Crew LLP STREET: Two Embarcadero Center, Eighth Floor
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Query Match 0.4%; Score 18; DB Best Local Similarity 100.0%; Pred. No. 3.3 Matches 18; Conservative 0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           OTHER INFORMATION: poly-T oligonucleotide
                                                                                                                                                                                                                                                                                               Sequence 141, Application US/10776917
Publication No. US20040248840A1
GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                APPLICANT: HANSEN, BO
APPLICANT: THRUE, CHARLOTTE ALBAEK
APPLICANT: WESTERGAARD, MAJKEN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ZIP: 94111-3834
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
                                                                                                             5025 AAAAAAAAAAAAAAA 5042
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  5025 AAAAAAAAAAAAAAA 5042
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    18 AAAAAAAAAAAAAA 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CITY: San Francisco
STATE: California
COUNTRY: USA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ORGANISM: Artificial sequence
                                                                                                                                                                  18 AAAAAAAAAAAAAAAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     NUMBER OF SEQUENCES: 9
                                                                                                                                                                                                                                                                      JS-10-776-917-141/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              JS-10-766-096-9/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TYPE: DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     RESULT 499
                                                                                                               ò
                                                                                                                                                               g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ð
                                                                                                                                                                                                                                                                                                                                         Sequence 150, Application US/10776933
| Publication No. US20040241717A1
| GENERAL INFORMATION:
| APPLICANT: HANSEN BO
| APPLICANT: HANSEN BO
| APPLICANT: THRUE, CHARLOTTE ALBAEK
| APPLICANT: WISSENBACH, MARGIT
| TITLE OF INVENTION: LOGGERED COMPOUNDS FOR THE MODULATION OF THIOREDOXIN
| TITLE OF INVENTION: EXPRESSION
| TITLE OF INVENTION: EXPRESSION
| TITLE OF INVENTION: EXPRESSION
| FILE REFERENCE: 58614(71432)
| CURRENT APPLICATION NUMBER: US/10/776,933
| CURRENT APPLICATION NUMBER: 60/446,374
| PRIOR PALICATION NUMBER: 60/446,374
| PRIOR FILING DATE: 2003-02-10
| NUMBER OF SEQ ID NOS: 150
| SOFTWARE: Patentin Ver: 3.2
| LENTH: 18
                                                                                                             ö
                                                                                                             Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               OTHER INFORMATION: Description of Artificial Sequence: Synthetic OTHER INFORMATION: poly-T oligonucleotide
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                OTHER INFORMATION: This sequence may emcompass 12-18 nucleotides OTHER INFORMATION: according to the specification as filed US-10-776-933-150
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ö
                                                                                                             ö
                                                     Query Match 0.4%; Score 18; DB 1; Length 18; Best Local Similarity 100.0%; Pred. No. 3.3e+02; Matches 18; Conservative 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          / Match 0.4%; Score 18; DB 1; Length 18; Local Similarity 100.0%; Pred. No. 3.3e+02; Nes 18; Conservative 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             APPLICANT: Chen, Jianzhu
APPLICANT: Chen, Jianzhu
APPLICANT: Ge, Qing
APPLICANT: Ge, Qing
APPLICANT: Elsen, Herman
FILE REFERENCE: 0492611-0506
CURRENT APPLICATION WOMBER: US/10/674,159A
CURRENT FILING DATE: 2003-09-29
NUMBER OF SEQ ID NOS: 271
SOFTWARE: Patentin version 3.2
SEQ ID NO 112
LENGTH: 18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              US-10-674-159A-112/c
; Sequence 112, Application US/10674159A
; Publication No. US20040242518A1
; GENERAL INFORMATION:
                                                                                                                                                            5025 AAAAAAAAAAAAAA 5042
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    5025 AAAAAAAAAAAAAA 5042
                                                                                                                                                                                                              18 AAAAAAAAAAAAAA 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    18 AAAAAAAAAAAAAA 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TYPE: DNA
ORGANISM: Artificial Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TYPE: DNA
ORGANISM: Artificial Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      OTHER INFORMATION: mRNA US-10-674-159A-112
                                                                                                                                                                                                                                                                                             RESULT 496
US-10-776-933-150/c
US-10-831-778-939
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Query Match
Best Local S
Matches 18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       FEATURE:
```

셤 ઠે

ö

Сарв . 0

```
APPLICANT: HANSEN, BO
APPLICANT: THUUS, CHRLOTTE ALBAEK
APPLICANT: HANSEN, MAJKEN
APPLICANT: PHUB, CHRLOTTE ALBAEK
APPLICANT: WESTERGAARD, MASJKEN
APPLICANT: WESTERGAARD, MASJKEN
APPLICANT: WISSENBACH, MASSIT
TITLE OF INVENTION: OLIGOMERIC COMPOUNDS FOR THE MODULATION OF SURVIVIN EXPRESSION
TITLE OF INVENTION: OLIGOMERIC COMPOUNDS FOR THE MODULATION OF SURVIVIN EXPRESSION
FILE REPERENCE: 58610 (714.32)
CURRENT APPLICATION NUMBER: US/10/76,934
CURRENT APPLICATION NUMBER: 60/446,372
PRIOR PILING DATE: 2003-02-10
PRIOR FILING DATE: 2003-01-19
NUMBER OF SEQ ID NOS: 741
SOOFWARE: PATCHELIN VERSION 3.2
SEQ ID NO 741
LENGTH: 18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CTHER INFORMATION: this sequence may encompass 12-18 nucleotides according to the CTHER INFORMATION: specification as filed US-10-776-934-741
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Sequence 24, Application US/10601140A

Sequence 24, Application US/20050053942A1

Publication No. US20050053942A1

GENERAL INFORMATION:
APPLICANT: MAUPRINEN, SAKARI
APPLICANT: APPLICANT: MURBATION: MUCLEOTIDE SEQUENCE
TITLE OF INVENTION: MUCLEOTIDE SEQUENCE
TITLE REFERENCE: 57764(71994)
CURRENT FILING DATE: 2003-06-20
PRIOR APPLICATION NUMBER: US 60/390,928
PRIOR APPLICATION NUMBER: US 60/390,928
PRIOR PRING DATE: 2002-06-24

NUMBER OF SEQ ID NOS: 45

SOFTWARE: Patentin Ver. 3.2

SEQ ID NO 24

LENGTH: 18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Ø
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         LOCATION: (1). [18)
OTHER INFORMATION: this sequence may encompass 12-18 nucleotides
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       .
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  OTHER INFORMATION: Description of Artificial Sequence: Primer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Length 18;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Length 18;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       0.4%; Score 18; DB 1; Le
100.0%; Pred. No. 3.3e+02;
tive 0; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              DB 1; Le
3.3e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Query Match 0.4%; Score 18; DB Best Local Similarity 100.0%; Pred. No. 3.3 Matches 18; Conservative 0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            OTHER INFORMATION: poly-T oligonucleotide
           S-10-776-934-741/c
Sequence 741, Application US/10776934
Publication No. US20050014712A1
GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       5025 AAAAAAAAAAAAAAA 5042
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         5025 AAAAAAAAAAAAAAA 5042
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ORGANISM: Artificial Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TYPE: DNA ORGANISM: Artificial sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AAAAAAAAAAAAAAAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 NAME/KEY: misc_feature
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Query Match
Best Local Similarity
Matches 18; Conserva
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      US-10-601-140A-24
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TYPE: DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    q
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Length 18;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Query Match
0.4%; Score 18; DB 1; Length 18;
Best Local Similarity 100.0%; Pred. No. 3.3e+02;
Matches 18; Conservative 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Length 18;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Indels
    APPLICATION NUMBER: US/10/766,096
FILING DATE: 27-Jan-2004
FILING DATE: 27-Jan-2004
CLASSIFICATION: 435
PRIOR APPLICATION NUMBER: US/08/884,029
FILING DATE: 27-JUN-1997
ATTORNEY/AGBY INPORMATION:
NAME: PARENCE, Annette S.
REGISTRATION NUMBER: 42,058
REFERENCE/DOCKET NUMBER: 02558B-059100US
TELECHONE (415) 576-0200
TELEPHONE: (415) 576-0300
INFORMATION FOR SEQ 1D NO: 9:
SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                0.4%; Score 18; DB 1; Le
100.0%; Pred. No. 3.3e+02;
tive 0; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             OTHER INFORMATION: /mod base= OTHER /note= "t at postitions 13-18 may be present or absent" SEQUENCE DESCRIPTION: SEQ ID NO: 9:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Sequence 10, Application US/10638141

Publication No. US20050003364A1

GENERAL INFORMATION:
APPLICANT: Stanton, Lawrence W.
APPLICANT: Stanton, Lawrence W.
APPLICANT: Stanton, Ann Marie
TITLE OF INVENTION: SECRETED FACTORS
FILE REFRENCE: SCIOS.013A
CURRENT FILING DATE: 2003-08-07
PRIOR APPLICATION NUMBER: US/09/665,728
PRIOR APPLICATION NUMBER: 60/156,277
PRIOR FILING DATE: 1999-09-27
NUMBER OF SEQ ID NOS: 19
SOFTWARE: FastSEQ for Windows Version 4.0
SEQ ID NO 10
LENGTH: 18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  NAME/KEY: modified_base LOCATION: 13..18 OTHER INFORMATION: /mod
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          5025 AAAAAAAAAAAAAA 5042
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               5025 AAAAAAAAAAAAAA 5042
                                                                                                                                                                                                                                                                                                                                                             LENGTH: 18 base pairs
TYPE: nucleic acid
STRANDEDNESS: single
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        18 AAAAAAAAAAAAAAA 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   18 AAAAAAAAAAAAAAA 1
CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ORGANISM: Artificial Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  OTHER INFORMATION: synthetic
                                                                                                                                                                                                                                                                                                                                                                                                                                TOPOLOGY: linear
MOLECULE TYPE: DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     18; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Best Local Similarity
Matches 18; Conserve
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               RESULT 500
US-10-638-141-10/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          US-10-638-141-10
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            US-10-766-096-9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TYPE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    8
```

à

```
Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TYPE: DNA ORGANISM: Artificial
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ORGANISM: Artificial
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    JS-10-503-120-1/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       RESULT 506
US-10-503-120-8/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           US-10-503-120-1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              US-10-503-120-8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TYPE: DNA
                                                                                                                                                                                                                                                                                     ઠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ઠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             RESULT 504

US-10-669-962-27/C

i Sequence 27, Application US/10669962

i Publication No. US20050081264A1

i GENERAL INFORMATION:

i APPLICANT:

APPLICANT: Brigliera, Filippa

i APPLICANT: Michael, Michael Z.

i TITLE OF INVENTION: GENETIC SEQUENCES ENCODING FLAVONOID PATHWAY ENZYMES

i TITLE OF INVENTION: AND USES THEREFOR

i FILE REFERENCE: 11658

CURRENT APPLICATION NUMBER: US/10/669,962

i CURRENT APPLICATION NUMBER: US/09/142,108C

i PRIOR APPLICATION NUMBER: PN9386

i PRIOR FILING DATE: 1996-03-01

i PRIOR FILING DATE: 1996-03-01

i RIOR APPLICATION NUMBER: PN9386

i RIOR PILING DATE: 1996-03-01

i RIOR APPLICATION NUMBER: 203-03-01

i RIOR APPLICATION NUMBER: NP386

i RIOR APPLICATION NUMBER: NP386

i RIOR 27

I LENGRES DATE OF US OF
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ö
                                                                                                                                                                            US-10-884-6.17-2/C

Sequence 2, Application US/10884617

Publication No. US20050054730A1

GENERAL INCRMATION:

APPLICANT: Fu, Jin

APPLICANT: Flower of the University of California

APPLICANT: Plomelli, Daniele

APPLICANT: The Regents of the University of California

TILL OF INVENTION: Compounds, Compositions and Treatments of

TILLE OF INVENTION: Object than olimide-Like Modulators of PPARalpha

FILE REFERENCE: 02307-13331046.

CURRENT APPLICATION NUMBER: US 60/279,542

PRIOR FILING DATE: 2001-03-27

PRIOR FILING DATE: 2001-10-31

PRIOR FILING DATE: 2001-10-31

PRIOR FILING DATE: 2001-10-31

PRIOR FILING DATE: 2003-07-02

NUMBER OF SEQ ID NOS: 23

NUMBER OF SEQ ID NOS: 23

SOFTWARE: PATENTIN VET: 2.1

SEQ ID NO 2

LENGTH: 18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    FEATURE: OTHER INFORMATION: Description of Artificial Sequence:Oligo(dT)-12-18 OTHER INFORMATION: primer for reverse transcription of total RNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    NAME/KEY: modified base in CCATION: (13)..(18) CCATION: (13)..(18) CTHER INFORMATION: t at positions 13-18 may be present or absent US-10-884-617-2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         0.4%; Score 18; DB 1; Length 18; 100.0%; Pred. No. 3.3e+02; Live 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             5025 AAAAAAAAAAAAAAA 5042
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        18 AAAAAAAAAAAAAA 1
18 AAAAAAAAAAAAAA 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TYPE: DNA
ORGANISM: Artificial Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TYPE: DNA ORGANISM: Artificial Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             18; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ઠે
```

```
Sequence of the property of th
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sequence 8, Application Us/10503120

Publication No. US20050142535A1

GENERAL INFORMATION:

TITLE OF INVENTION: OLIGONUCLEOTIDES COMPRISING ALTERNATING SEGMENTS AND USES THEREOF

TITLE OF INVENTION: OLIGONUCLEOTIDES COMPRISING ALTERNATING SEGMENTS AND USES THEREOF

TITLE OF INVENTION: OLIGONUCLEOTIDES COMPRISING ALTERNATING SEGMENTS AND USES THEREOF

CURRENT APPLICATION NUMBER: US/10/503,120

CURRENT FILING DATE: 2004-07-30

PRIOR FILING DATE: 2004-07-30

NUMBER OF SEQ ID NOS: 22

SOFTWARE PATENTING DATE: 2002-02-01

NUMBER OF SEQ ID NOS: 22

SOFTWARE PATENTING DATE: 2003-02-01

SEQ ID NO 8

LENGTH: 18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                NAME/KEY: misc_feature
LOCATION: (1). (17)
OTHER INFORMATION: Residues 1, 3, 5, 7, 9, 11, 13, 15 and 17 are 2'-O-methyl-D-uridi
OTHER INFORMATION: ne
                                                                                                                                                                                                                                                                                                             ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ö
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence:oligonucleotide
US-10-669-962-27
                                                                                                                                                                                                                                                                                                        Gарв
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Gapa
                                                                                                                                                                                                                                                                                                             ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Length 18;
                                                                                                                                                                                                       DB 1; Length 18; 3.3e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Length 18;
                                                                                                                                                                                                                                                                                                             Indele
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Query Match
0.4%; Score 18; DB 1; L.
Best Local Similarity 100.0%; Pred. No. 3.3e+02;
Matches 18; Conservative 0; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         0.4%; Score 18; DB 1; Lo
100.0%; Pred. No. 3.3e+02;
                                                                                                                                                                                                 Query Match 0.4%; Score 18; DB Best Local Similarity 100.0%; Pred. No. 3.3 Matches 18; Conservative 0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     FEATURE: OTHER INFORMATION: Oligonucleotide
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    FEATURE: OTHER INFORMATION: Oligonucleotide
                                                                                                                                                                                                                                                                                                                                                                                                              5024 TAAAAAAAAAAAAA 5041
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         5025 AAAAAAAAAAAAAA 5042
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     18 TAAAAAAAAAAAAA 1
```

```
RESULT 509
US-10-503-120-21
Sequence 21, Application US/10503120
| Sequence 21, Application No. US20050142535A1
| GENERAL INFORMATION:
| APPLICATION: OLIGONUCLEOTIDES COMPRISING ALTERNATING SEGMENTS AND USES THEREOF
| TITLE OF INVENTION: OLIGONUCLEOTIDES COMPRISING ALTERNATING SEGMENTS AND USES THEREOF
| TITLE OF INVENTION: OLIGONUCLEOTIDES COMPRISING ALTERNATING SEGMENTS AND USES THEREOF
| TITLE OF INVENTION: UNMERR: US/10/503,120
| CURRENT FILING DATE: 2004-07-30
| PRIOR PULLING DATE: 2002-01
| NUMBER OF SEQ ID NOS: 22
| SOFTWARE: Patentin version 3.1
| SEQ ID NO 21
| LENGTH: 18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Length 18;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Length 18;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   0.4%; Score 18; DB 1; Le 100.0%; Pred. No. 3.3e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Query Match 0.4%; Score 18; DB 1; L. Best Local Similarity 100.0%; Pred. No. 3.3e+02; Matches 18; Conservative 0; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ; OTHER INFORMATION: Target RNA oligonucleotide US-10-503-120-21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Sequence 10, Application US/10775973

Sequence 10, Application US/10775973

Publication No. US20050158729A1

GENERAL INFORMATION:
APPLICANT: Stanton, Lawrence W.
APPLICANT: Kapoun, Ann Marie
TILE REFERENCE: SCIOS.014A

CURRENT APPLICATION NUMBER: US/10/775,973

CURRENT FILING DATE: 2004-02-09

PRIOR APPLICATION NUMBER: 60/156,280

PRIOR APPLICATION NUMBER: 60/156,280

PRIOR PILING DATE: 1999-09-27

NUMBER: OF SEQ ID NOS: 19

SEQ ID NO 10

LENGTHARE: FastSEQ for Windows Version 4.0

SEQ ID NO 10
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   100.0%; Prec. ...
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     RESULT 511
US-11-024-428-7/c
; Sequence 7, Application US/11024428
; Publication No. US20050106676A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            5025 AAAAAAAAAAAAAAA 5042
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              5025 AAAAAAAAAAAAAA 5042
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1 AAAAAAAAAAAAAAA 18
           18 AAAAAAAAAAAAAA 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TYPE: DNA ORGANISM: Artificial Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     18 дадададададададада
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     OTHER INFORMATION: synthetic US-10-775-973-10
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Ouery Match
Best Local Similarity 100.C
Matches 18; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                              TYPE: RNA
ORGANISM: Artificial
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     à
                  g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Sequence 10, Application US/10503120
Publication No. US20050142535A1
GENERAL INFORMATION:
TITLE OF INVENTION: OLIGONUCLECTIDES COMPRISING ALTERNATING SEGMENTS AND USES THEREOF
FILE REFERENCE: 85827-63
CURRENT APPLICATION NUMBER: US/10/503,120
CURRENT FILING DATE: 2004-07-30
FRIOR PAPLICATION NUMBER: US 60/352,873
NUMBER OF SEQ ID NOS: 22
SOFTWARE: Patentin version 3.1
SEQ ID NO 10
LENGTH: 18
                                                                                                                                                             Sequence 9, Application US/10503120
Publication No. US20050142535A1
GENERAL INFORMATION:
APPLICANT: MCGILL UNIVERSITY ET AL.
TITLE OF INVENTION: OLIGONUCLEOTIDES COMPRISING ALTERNATING SEGMENTS AND USES THEREOF
FILE REFERENCE: 85837-63
CURRENT FILING DATE: 2004-07-30
FRICK APPLICATION NUMBER: US 60/352,873
FRICK APPLICATION UNWBER: US 60/352,873
FRICK APPLICATION UNBER: 2002-02-01
NUMBER OF SEQ ID NOS: 22
SOFTWARE: Patentin version 3.1
FROM IN 00 9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ö
ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ; IOCATION: (1)..(15)
; OTHER INFORMATION: Residues 1-3, 7-9, and 13-15 are 2'-O-methyl-D-uridine US-10-503-120-9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Gaps
Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            FEATURE:
NAMENTALY
NAMENTON: (1). - (18)
OTHER INFORMATION: Residues 1-6 and 13-18 are 2'-0-methyl-D-uridine
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  .
0
ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Query Match 0.4%; Score 18; DB 1; Length 18; Best Local Similarity 100.0%; Pred. No. 3.3e+02; Matches 18; Conservative 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Match 0.4%; Score 18; DB 1; Length 18; Local Similarity 100.0%; Pred. No. 3.3e+02; es 18; Conservative 0; Mismatches 0; Indels
0; Indels
0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       OTHER INFORMATION: Oligonucleotide
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     OTHER INFORMATION: Oligonucleotide
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         5025 AAAAAAAAAAAAAAA 5042
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             5025 AAAAAAAAAAAAAA 5042
                                           5025 AAAAAAAAAAAAAA 5042
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      18 AAAAAAAAAAAAAAAA 1
                                                                                      18 AAAAAAAAAAAAAAA 1
  Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  NAME/KEY: misc_feature
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TYPE: DNA ORGANISM: Artificial
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TYPE: DNA
ORGANISM: Artificial
                                                                                                                                                        RESULT 507
US-10-503-120-9/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  US-10-503-120-10
    18;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     LENGTH: 18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Best Loca
Matches
    Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  g
                                                                                      쉱
                                               8
```

δ

```
US-10-620-642-32/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            US-10-934-890-22
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  SEQ ID NO 22
LENGTH: 19
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ö
APPLICANT: KURODA, KYOKKO
APPLICANT: NAKAJIWA, TERUMI
TITLE OF INVENTION: NOVELE PROCTEINS HAVING HEMOLYTIC ACTIVITY AND GENES
TITLE OF INVENTION: NOVEL PROCTEINS
TITLE OF INVENTION: SCOLIUS
TITLE OF INVENTION: SCOLIUS
FILE REFERENCE: 037181.50611US
CURRENT APPLICATION NUMBER: US/11/024,428
CURRENT PILING DATE: 2004-12-30
PRIOR PLILING DATE: 2005-27
PRIOR PLILING DATE: 2001-03-21
PRIOR PILING DATE: 2001-03-21
PRIOR FILING DATE: 2001-03-21
PRIOR FILING DATE: 2001-03-21
PRIOR FILING DATE: 2001-03-21
NUMBER OF SEQ ID NOS: 12
SCOTTANTE OF SEQ ID NOS: 12
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              OTHER INFORMATION: Description of Artificial Sequence: Synthetic OTHER INFORMATION: oligonucleotide
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      FEATURE:

7 OTHER INFORMATION: this sequence may encompass 12-18 nucleotides

US-11-024-428-7
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Query Match 0.4%; Score 18; DB 1; Length 19; Best Local Similarity 100.0%; Pred. No. 3.5e+02; Matches 18; Conservative 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Match 0.4%; Score 18; DB 1; Length 18; Local Similarity 100.0%; Pred. No. 3.3e+02; Ose 18; Conservative 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Sequence 22, Application US/10913246

Publication No. US20050003441A1

GENERAL INFORMATION:

TITLE OF INVENTION: MAPLIFICATION OF RNA SEQUENCES

TITLE OF INVENTION: MAPLIFICATION OF RNA SEQUENCES

TITLE OF INVENTION: MAPLIFICATION OF RNA SEQUENCES

FILE REFERENCE: 492692000500

CURRENT APPLICATION NUMBER: US/10/913,246

CURRENT FILING DATE: 2004-08-05

FRIOR PRILING DATE: 2002-03-11

PRIOR PILING DATE: 2002-03-11

PRIOR FILING DATE: 2002-03-11

PRIOR FILING DATE: 2002-03-11

PRIOR FILING DATE: 2002-03-11
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      NUMBER OF SEQ ID NOS: 25
SOFTWARE: FastSEQ for Windows Version 4.0
SEQ ID NO 22
LENGTH: 19
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ; OTHER INFORMATION: n = A,T,C or G US-10-913-246-22
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      5025 AAAAAAAAAAAAAA 5042
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             5025 AAAAAAAAAAAAAAA 5042
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              18 AAAAAAAAAAAAAA 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TYPE: DNA
ORGANISM: Artificial Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TYPE: DNA
ORGANISM: Artificial Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              OTHER INFORMATION: Primer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      NAME/KEY: misc_feature
LOCATION: 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           US-10-913-246-22
                                                                                                                                                                                                                                                                                                                                                                                                                                    SEQ ID NO 7
LENGTH: 18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Best Loca
Matches
```

```
Gape
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Bosselman, Robert A.
Suggs, Sidney V.
Martin, Francis H.
TITLE OF INVENTION: Stem Cell Factor
NUMBER OF SEQUENCES: 104
CORRESPONDENCE ADDRESS:
ADDRESSEE: Marshall, O'Toole, Gerstein, Murray & Borun
STREET: 6300 Sears Tower, 233 South Wacker Drive
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CITY: Chicago
STATE: Illinois
COUNTRY: United States of America
ZIP: 66060-6402
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Length 19;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Indels
                                                                        APPLICANT: KURTA, NURITH
APPLICANT: KURTA, NURITH
TITLE OF INVENTION: METHODS AND COMPOSITIONS FOR
TITLE OF INVENTION: METHODS AND COMPOSITIONS FOR
TITLE OF INVENTION: AMPLIFICATION OF RNA SEQUENCES
FILE REFERENCE: 492692000500
CURRENT APPLICATION NUMBER: US/10/100,321
PRIOR FILING DATE: 2002-03-11
PRIOR APPLICATION NUMBER: US 60/274,550
PRIOR APPLICATION NUMBER: US 60/274,550
PRIOR APPLICATION NUMBER: US 60/274,550
NUMBER OF SEQ ID NOS: 25
SOFTWARE: FASHSEQ for Windows Version 4.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 DB 1; Le
3.5e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Query Match 0.4%; Score 18; DB Best Local Similarity 100.0%; Pred. No. 3.5 Matches 18; Conservative 0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         APPLICATION NUMBER: US/10/620,642
FILING DATE: 16-Jul-2003
CLASSIFICATION: <UNKNOWN>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                APPLICATION NUMBER: US/10/175,608
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         FILING DATE: 16-OCt-2002
APPLICATION NUMBER: 09/635,249
FILING DATE: 07-AUG-2000
APPLICATION NUMBER: 09/486,546
Sequence 22, Application US/10934890
Publication No. US20050014192A1
GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Sequence 32, Application US/10620642
Publication No. US20050080250A1
GENERAL INFORMATION:
APPLICANT: Zsebo, Krisztina M.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   OTHER INFORMATION: n = A, T, C or G
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        5025 AAAAAAAAAAAAAAA 5042
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                2 AAAAAAAAAAAAAA 19
                                                                                                                                                                                                                                                                                                                                                                                                                                                         TYPE: DNA
ORGANISM: Artificial Sequence
PEATURE:
OTHER INFORMATION: Primer
PEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               NAME/KEY: misc_feature LOCATION: 1
```

```
APPLICANT: Wyeth
APPLICANT: Wyeth
APPLICANT: Wyeth
APPLICANT: O'Toole, Margot
APPLICANT: O'Toole, Margot
APPLICANT: O'Toole, Margot
APPLICANT: Liu, Will
TITLE OF INVENTION: COMPOSITIONS AND METHODS FOR DIAGNOSING AND TREATING AUTOIMMUNE
TITLE OF INVENTION: DISEASES
FILE REPRENENCE: 031996-023000 (AM101331L)
CURRENT APPLICATION NUMBER: US/10/786,720
CURRENT FILING DATE: 2004-02-26
NUMBER OF SEQ ID NOS: 21135
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Length 21;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           0.4%; Score 18; DB 1; Length 20; 100.0%; Pred. No. 3.7e+02; tive 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Score 17.8; DB 1;
Pred. No. 4e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                  01017/35199
                                                                                                          FILING DATE: 25-NOV-1992
APPLICATION NUMBER: 07/684,535
FILING DATE: 10-APR-1991
APPLICATION NUMBER: 09/689,701
FILING DATE: 10-CCT-1991
APPLICATION NUMBER: 07/573,616
FILING DATE: 24-AUG-1990
APPLICATION NUMBER: 07/573,616
FILING DATE: 11-UNV-1990
APPLICATION NUMBER: 07/422,383
FILING DATE: 16-CCT-1989
ATTORIEY/AGENT INFORMATION:
REGISTRATION NUMBER: 36,107
REGISTRATION NUMBER: 36,107
REGISTRATION NUMBER: 36,107
REGISTRATION NUMBER: 36,107
TELECOMMUNICATION INFORMATION:
TELECOMMUNICATION: 1100 PROPAGATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          DESCRIPTION: SEQ ID NO: 34:
  APPLICATION NUMBER: 09/486,546
FILING DATE: 24-MAY-1995
APPLICATION NUMBER: 08/172,329
                                                                   FILING DATE: 21-DEC-1993
APPLICATION NUMBER: 07/982,255
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Sequence 113, Application US/10786720 Publication No. US20040191818A1 GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          845 AAGCATCTGAGAAAGCAGCTA 865
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     21 AAGCATCTAATAAAGCAGCTA 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        5025 AAAAAAAAAAAAAAA 5042
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    INFORMATION FOR SEQ ID NO: 34:
SEQUENCE CHARACTERISTICS:
LENGTH: 20 base pairs
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TELEFAX: 312/474-0448
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      18 AAAAAAAAAAAAAAA 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                SOFTWARE: Patentin version 3.2
SEQ ID NO 113
LENGTH: 21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Query Match 0.4%;
Best Local Similarity 90.5%;
Matches 19; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      STRANDEDNESS: singl
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TYPE: RNA
ORGANISM: RNAi-sense strand
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TOPOLOGY: linear
MOLECULE TYPE: DNA
SEQUENCE DESCRIPTION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Query Match
Best Local Similarity 100.0
Matches 18; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       RESULT 516
US-10-786-720-113/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    US-10-786-720-113
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  US-10-620-642-34
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ద
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CORRESPONDENCE ADDRESS:
ADDRESSEE: Marshall, O'Toole, Gerstein, Murray & Borun STREET: 6300 Sears Tower, 233 South Wacker Drive CITY: Chicago
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   STATE: 1111016
COUNTRY: United States of America
CONDUTER READABLE FORM:
MEDIUM TYPE: FLORY disk
COMPUTER: IBM FC Compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOSTWARE: Patentin Release #1.0, Version #1.30
CURSOT APPLICATION DATA:
APPLICATION NUMBER: US/10/620,642
FILING DATE: 16-Jul-2003
CLASSIFTATION: «Unknown»
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Query Match 0.4%; Score 18; DB 1; Length 20; Best Local Similarity 100.0%; Pred. No. 3.7e+02; Matches 18; Conservative 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                            01017/35199
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      APPLICATION NUMBER: US/10/175,608 FILING DATE: 16-Oct-2002 APPLICATION NUMBER: 09/635,249
                                                                                                     FILING DATE: 10-APR-1991
APPLICATION NUMBER: 09/589,701
FILING DATE: 10-OCT-1991
APPLICATION NUMBER: 07/573,616
FILING DATE: 24-AUG-1990
APPLICATION NUMBER: 07/537,198
FILING DATE: 11-UN-1990
APPLICATION NUMBER: 07/422,383
FILING DATE: 16-OCT-1989
ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 APPLICANT: Zsebo, Krisztina M.
Bosselman, Robert A.
Suggs, Sidney V.
Martin, Francis H.
TITLE OF INVENTION: Stem Cell Factor
NUMBER OF SEQUENCES: 104
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        SEQUENCE DESCRIPTION: SEQ ID NO: 32: US-10-620-642-32
                     FILING DATE: 21-DEC-1993
APPLICATION NUMBER: 07/982,255
FILING DATE: 25-NOV-1992
APPLICATION NUMBER: 07/684,535
08/172,329
                                                                                                                                                                                                                                                                                                                                                 NAME: Clough, David W.
REGISTRATION NUMBER: 36,107
REFERENCE/DOCKET NUMBER: 010
                                                                                                                                                                                                                                                                                                                                                                                                                  TELECOMMUNICATION INFORMATION:
TELEPHONE: 312/474-6300
TELEFAX: 312/474-0448
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  RESULT 515
US-10-620-642-34/c
Sequence 34, Application US/10620642;
Publication No. US2005008025031
GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         5025 AAAAAAAAAAAAAA 5042
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         INFORMATION FOR SEQ ID NO: 32:
SEQUENCE CHARACTERISTICS:
LENGTH: 20 base pairs
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TYPE: nucleic acid
STRANDEDNESS: single
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AAAAAAAAAAAAAA 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TELEX: <Unknown>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TOPOLOGY: linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      MOLECULE TYPE: DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   18
```

ઠે 셤

```
ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ö
                 SQUENCE 680, Application US/10712795
| Publication No. US20040214325A1 |
| GENERAL INPORMATION: |
| APPLICANT: Crooke et al. |
| TILLE OF INVENTION: ANTISENSE MODULATION OF APOLIPOPROTEIN B EXPRESSION |
| FILE REPRENCE: 30566/39662 |
| CURRENT APPLICATION NUMBER: US/10/712,795 |
| CURRENT PILING DATE: 2003-11-13 |
| PRIOR PRILICATION NUMBER: PS/426,234 |
| PRIOR PILING DATE: 2002-11-13 |
| PRIOR PILING DATE: 2003-65-13 |
| NUMBER OF SEQ ID NOS: 892 |
| SEQ ID NO 850 |
| LENGTH: 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Squence 850, Application US/10920612
| Publication No. US2005009088A1
| GENERAL INFORMATION:
| APPLICATION NO. US2005009088A1
| TITLE OF INVENTION: ANTISENSE MODULATION OF APOLIPOPROTEIN B EXPRESSION
| TITLE OF INVENTION: ANTISENSE MODULATION OF APOLIPOPROTEIN B EXPRESSION
| TITLE OF INVENTION: AUTISENSE MODULATION OF APOLIPOPROTEIN B EXPRESSION
| TITLE OF INVENTION: AUTISENSE WS/10/920,612
| CURRENT APPLICATION NUMBER: US/10/920,612
| PRIOR PILLING DATE: 2003-11-15
| PRIOR PILLING DATE: 2003-11-15
| PRIOR PILLING DATE: 2003-11-13
| PRIOR PILLING DATE: 2003-11-13
| NUMBER OF SEQ ID NOS: 892
| LENGTH: 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Query Match 0.3%; Score 17.4; DB 1; Length 20; Best Local Similarity 94.7%; Pred. No. 4.1e+02; Matches 18; Conservative 0; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Query Match

0.3%; Score 17.4; DB 1; Length 20;
Best Local Similarity 94.7%; Pred. No. 4.1e+02;
Matches 18; Conservative 0; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ) OTHER INFORMATION: Antisense Oligonucleotide US-10-712-795-850
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         , OTHER INFORMATION: Antisense Oligonucleotide US-10-920-612-850
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 RESULT 519
US-10-831-901A-229729/c
; Sequence 29729, Application US/10831901A
; Publication No. US20050100885A1
; GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         2903 TGACAGAGGAAGAGGAAGA 2921
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             2903 TGACAGAGGAAGAGGAAGA 2921
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          rcacacarcaacacaaca 19
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1 TGACAGATGAAGAGGAAGA 19
                                                                                                                                                                                                                                                                                                                                                                                                                                                      TYPE: DNA
ORGANISM: Artificial Seguence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ORGANISM: Artificial Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             APPLICANT: Crooke, Stanley T.
US-10-712-795-850
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            US-10-920-612-850
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TYPE: DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ઠે
```

```
## APPLICANT: Susangatu, APPLICANT: Susangatu, APPLICANT: Freier, Susan M.
### APPLICANT: Freier, Christian
### APPLICANT: Massire, Christian
### APPLICANT: Lowery, Kristin Sannes
### APPLICANT: Lowery, Kristin Sannes
### APPLICANT: Swayze, Eric
### APPLICANT: Bareria F.
### APPLICANT: NUMBER: US/10/831,901A
### APPLICANT: NUMBER: US/466,426
### PRIOR PAPLICANTION NUMBER: G0/466,426
### PRIOR FILING DATE: 2003-04-08
### PRIOR FILING DATE: 2003-04-06
### PRIOR FILING DATE: 2003-06-06
### PRIOR FILING DATE: 2003-06-10
### PRIOR FILI
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Sequence 4, Application US/10374686

| Sequence 4, Application US/10374686
| Publication No. US2004002089A1
| GENERAL INNORMATUON:
| APPLICANT: Dubertret, Benoit
| APPLICANT: Calame, Mitchel
| TITLE OF INVENTION: Methode Employing Fluorescent Quenching
| TITLE OF INVENTION: Dy Metal Surfaces
| FILE REFERENCE: 600-1-260PCTUS
| CURRENT APPLICATION NUMBER: US/10/374,686
| CURRENT APPLICATION NUMBER: DC1/US01/41941
| PRIOR APPLICATION NUMBER: 60/228728
| PRIOR FILING DATE: 2000-08-29
| PRIOR APPLICATION NUMBER: 60/228728
| PRIOR APPLICATION NUMBER: 60/280350
| PRIOR FILING DATE: 2000-03-30
| NUMBER OF SEQ ID NOS: 6
| SOFTWARE: FastSEQ for Windows Version 4.0
| SEQ ID NO 4
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Length 20;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Query Match 0.3%; Score 17.4; DB 1; Best Local Similarity 94.7%; Pred. No. 4.1e+02; Matches 18; Conservative 0; Mismatches 1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ; OTHER INFORMATION: Antisense compound US-10-831-901A-29729
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         5025 AAAAAAAAAAAAAAA 5043
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      19 ACAAAAAAAAAAAAAA 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ORGANISM: Artificial Sequence FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TYPE: DNA
ORGANISM: Artificial Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ; OTHER INFORMATION: synthetic US-10-374-686-4
```

```
à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                g
                                                                                                                                                                                                                   Sequence 34, Application US/10412137
Publication No. US20040203141A1
GENERAL INFORMATION:
GENERAL INFORMATION:
APPLICANT: Ublocovsky, Jorge
TITLE OF INVENTION: THE VERNALIZATION RESPONSE AND FLOWERING TIME IN GRASSES
TITLE OF INVENTION: THE VERNALIZATION RESPONSE AND FLOWERING TIME IN GRASSES
TITLE OF SEPERENCE: 514112000300
CURRENT APPLICATION NUMBER: US/10/412,137
CURRENT FILING DATE: 2003-04-11
NUMBER OF SEQ ID NOS: 59
SOFTWARE: FastSEQ for Windows Version 4.0
SEQ ID NO 34
LENGTH: 22
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ö
                                           ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      US-10-723-947-34/C
US-10-723-947-34/C

Sequence 34, Application US/10723947
; Publication No. US20040205848A1
; Publication No. US20040205848A1
; APPLICANT: Dubcoveky, Jorge
; APPLICANT: Dubcoveky, Jorge
; APPLICANT: Tailuling
; TITLE OF INVENTION: REGILATION IN TEMPERATE GRASSES AND USES THEREOF
; TITLE OF INVENTION: REGILATION IN TEMPERATE GRASSES AND USES THEREOF
; TITLE OF INVENTION NUMBER: US/10/723,947
; CURRENT APPLICATION NUMBER: US/10/723,947
; CURRENT FILING DATE: 2003-11-26
; PRIOR PELING DATE: 2003-04-11
; NUMBER OF SEQ ID NOS: 159
; SOFTHARE: FastSEQ for Windows Version 4.0
; SEQ ID NO 34
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Gaps
                                           Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ö
                                             ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Score 17.4; DB 1; Length 22; Pred. No. 4.4e+02; 0; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Length 22;
Length 21;
                                           1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1; Indels
  0.3%; Score 17.4; DB 1;
94.7%; Pred. No. 4.2e+02;
iive 0; Mismatches 1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Query Match

0.3%; Score 17.4; DB 1;
Best Local Similarity 94.7%; Pred. No. 4.4e+02;
Matches 18; Conservative 0; Mismatches 1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     2785 AGCTTGTTCAGACATCTTC 2803
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       2785 AGCTTGTTCAGACATCTTC 2803
                                                                                       5050 AAAAAAAAAAAAACTCG 5068
                                                                                                                              2 AAAAAAACAAAAAAACTCG 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          19 AGCTTGTTCAGACATTTTC 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               19 AGCTTGTTCAGACATTTTC 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     0.3%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TYPE: DNA
ORGANISM: Artificial Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TYPE: DNA
ORGANISM: Artificial Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Query Match 0.3
Best Local Similarity 94.7
Matches 18; Conservative
    Query Match
Best Local Similarity 94.7'
Matches 18; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    FEATURE:
COTHER INFORMATION: Primer
US-10-723-947-34
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        , OTHER INFORMATION: Primer US-10-412-137-34
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 셤
                                                                                           8
```

```
US-01-263-969
US-09-263-969
US
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Length 22;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPREATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/263,959
FILING DATE: 05-MAR-1999
CLASSIFICATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Sequence 33, Application US/10361002
| Sequence 33, Application US/10361002
| Publication No. US20040170954A1
| GENERAL INFORMATION:
| APPLICANT: Clearant, Inc.
| APPLICANT: McKenney, Keith
| APPLICANT: Gillmeister, Lidia
| APPLICANT: Amisted, David
| TITLE OF INVENTION: Pathogen Inactivation Assay
| FILE REFERENCE: CI-0043
| TITLE OF INVENTION: Pathogen Inactivation Assay
| FILE REFERENCE: CI-0043
| CURRENT FILING DATE: 2003-02-10
| NUMBER OF SEQ ID NOS: 99
| SOFTWARE: PatentIn version 3.2
| LENGTH: 22
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Score 17.2; DB 1;
Pred. No. 4.6e+02;
0; Mismatches 3;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          REGISTRATION NUMBER: 33,963
REGISTRATION NUMBER: 33,963
REFRENCE FOCKET NUMBER: 920010.426C2
TELECOMMUNICATION INFORMATION:
TELEPAN: (206) 622-4900
TELEPAN: (206) 682-6031
INFORMATION FOR SEQ ID NO: 808:
SEQUENCE CHARACTERISTICS:
LENGTH: 22 base pairs
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               5044 AAAAAAAAAAAAAAAAAAAAC 5065
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1 AAAACAAAACAAAACAAAAC 22
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Query Match 0.3%;
Best Local Similarity 86.4%;
Matches 19; Conservative (
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TYPE: DNA
CRGANISM: Hepatitis B virus
US-10-361-002-33
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TYPE: nucleic acid

STRANDEDNESS: single

; TOPOLOGY: linear

US-09-263-959-808
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   US-10-361-002-33/c
```

```
ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ô
                                                                                                                                                                                                                                                                                                       Gapa
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Gapa
                                                                                                                                                                                                                                                                                                       ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Fernandes-Alnemri, Teresa
Litwack, Gerald
TITLE OF INVENTION: Application Protesse Mch6, Nucleic Acids
Encoding Same and Methods of Use
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CORRESPONDENCES:
ADDRESSEE: Campbell & Flores LLP
STREET: 4370 La Jolla Village Drive, Suite 700
CITY: San Diego
CITY: San Diego
CUNTRY: United States
ZIP: 92122
COMPUTER: READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: Ploppy disk
COMPUTER: PatentIn Release #1.0, Version #1.25
CURRENT APPLICATION NUMBER: US/09/746,731
FILING BATE: 22-Dec-2000
FILING BATE: 22-Dec-2000
                                                                                                                                                                                                                                                      Length 17;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Length 17;
                                                                                                                                                                                                                                                                                                     Indele
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Indela
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Query Match 0.3%; Score 17; DB 1; Le
Best Local Similarity 100.0%; Pred. No. 3.8e+02;
Matches 17; Conservative 0; Mismatches 0;
                                                                                                                                                                                                                                                    Query Match 0.3%; Score 17; DB 1; L. Best Local Similarity 100.0%; Pred. No. 3.8e+02; Matches 17; Conservative 0; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      PRIOR APPLICATION DATA:

APPLICATION NUMBER: US/08/865,579
FILING DATE: 29-MAY-1997
ATTORNEY/AGENT INFORMATION:
NAME: Campbell, Cathryn A.
REGISTRATION NUMBER: 31,815
REGISTRATION INFORMATION:
TELECOMMUNICATION INFORMATION:
TELEPHONE: (619) 535-9001
TELEPHONE: (619) 535-9449
INFORMATION FOR SEQ ID NO: 5:
SEQUENCE CHARACTERISTICS:
LENGTH: 17 base pairs
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ) MOLECULE TYPE: CDNA SEQ ID NO: 5: US-09-746-731-5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Sequence 5, Application US/09746731
Publication No. US20010016345A1
GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      APPLICANT: Alnemri, Emad S.
                                                                                                                                                                                                                                                                                                                                                                                            1 caddaarrcddcacdag 17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   16 CAGGAATTCGGCACGAG 32
              TELEFAX: (619) 535-9849
INFORMATION FOR SEQ ID NO: 5:
SEQUENCE CHARACTERISTICS:
LENGTH: 17 base pairs
TYPE: nucleic acid
STRANDEDNESS: single
(619) 535-9001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      NUMBER OF SEQUENCES: 87
                                                                                                                                                                                                                                                                                                                                                 16 CAGGAATTCGGCACGAG
                                                                                                                                                         TOPOLOGY: linear
MOLECULE TYPE: cDNA
US-08-865-579-5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            US-09-746-731-5
                                                                                                                                                                                                                                                                                                                                                 ò
                                                                                                                                                                                                                                                                                                                                                                                            셤
                                                                                                                                                                                                                                                                                                                                    APPLICANT: Clearant, Inc.
APPLICANT: McKenney, Keith
APPLICANT: Gillmeister, Lidja
APPLICANT: Gillmeister, Lidja
APPLICANT: Gillmeister, Lidja
APPLICANT: Armisted, David
TITLE OF INVENTION: Real-Time Polymerase Chain Reaction Using Large Target Amplicons
FILE REFRENCE: CI-0042
CURRENT APPLICATION NUMBER: US/10/361,004
CURRENT FILING DATE: 2003-02-10
NUMBER OF SEQ ID NOS: 99
SEQ ID NO 33
LENGTH: 22
                                                                 ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ó
                                                                 Gaps
                                                                 ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Sequence 5, Application US/08865579
Publication No. US20010006779A1
GENERAL INFORMATION:
APPLICANT: Alnemri, Emad S.
APPLICANT: Litwack, Gerald
TITLE OF INVENTION: Apoptcoic Protease Mch6, Nucleic Acids
TITLE OF INVENTION: Encoding Same and Methods of Use
NUMBER OF SEQUENCES: 87
CORRESPONDENCE ADDRESS:
ADDRESSEE: Campbell & Flores LLP
STREET: 4370 La Jolla Village Drive, Suite 700
            Query Match

0.3%; Score 17.2; DB 1; Length 22;
Best Local Similarity 86.4%; Pred. No. 4.6e+02;
Matches 19; Conservative 0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Score 17.2; DB 1; Length 22;
Pred. No. 4.6e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CITY: San Diego
CUTY: California
COUNTRY: United States
ZIP: 92122
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: Ploppy disk
COMPUTER: Patentin Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/865,579
FILING DATE: 29-MAY-1997
CLASSIFICATION: 435
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Query Match
0.3%; Score 17.2; EBest Local Similarity 86.4%; Pred. No. 4.6eMatches 19; Conservative 0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ATTORNEY/AGENT INFORMATION:
NAME: Cambbell, Cathryn A.
REGISTRATION NUMBER: 31,815
REFERENCE/DOCKET NUMBER: P-ID 2180
TELECOMMUNICATION INFORMATION:
                                                                                                           723 GAAGGTTTTTGCAATTCAGGAT 744
                                                                                                                                                    22 GAAGGAGTTTGCCATTCAGGAT 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         22 GAAGGAGTTTGCCATTCAGGAT 1
                                                                                                                                                                                                                                                                       ; Sequence 33, Application US/10361004; Publication No. US20040170981A1; GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TYPE: DNA ORGANISM: Hepatitis B virus
                                                                                                                                                                                                                           RESULT 525
US-10-361-004-33/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      US-10-361-004-33
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      a
```

셤

```
Sequence 5, Application US/10059749
; Publication No. US20020183504A1
; GENERAL INFORMATION: Emad S.
; APPLICANT: Alnemri, Emad S.
Litwack, Gerald
; TITLE OF INVENTION: Apoptotic Protease Mch6, Nucleic Acids
; Elitwack, Gerald
; Fernandes Apoptotic Protease Mch6, Nucleic Acids
; Encoding Same and Methods of Use
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Length 17;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CORRESPONDENCE ADDRESS:
ADDRESSEE: Campbell & Flores LLP
STREET: 4370 La Jolla Village Drive, Suite 700
                                                                                                                                                                                                                 COMPUTER: IBM PC compatible
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/944,851
FILING DATE: 31-Aug-2001
CLASSIFICATION: cUnknown>
                  CORRESPONDENCE ADDRESS:
ADDRESSEE: Campbell and Flores
STREET: 4370 La Jolla Village Drive, Suite 700
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            DB 1; Le 3.8e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                       NAME: Campbell, Cathryn A.
REGISTRATION NUMBER: 31,815
REFERENCE/DOCKET NUMBER: P-ID 1813
TELECOMMUNICATION INFORMATION:
TELEPHONE: (619) 535-9001
TELEPHONE: (619) 535-9001
INFORMATION FOR SEO ID NO: 6:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Query Match 0.3%; Score 17; DB Best Local Similarity 100.0%; Pred. No. 3.6 Matches 17; Conservative 0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                         PRIOR APPLICATION DATA:
    APPLICATION NUMBER: 08/556,627
    FILING DATE: 13-NOV-1995
    ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TOPOLOGY: linear
SEQUENCE DESCRIPTION: SEQ ID NO: 6:
                                                                                                                                                 ZIP: 92122
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    SEQUENCE CHARACTERISTICS:
LENGTH: 17 base pairs
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   16 CAGGAATTCGGCACGAG 32
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       STRANDEDNESS: single
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1 caccaartrcccaccac 17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        NUMBER OF SEQUENCES: 87
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TYPE: nucleic acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CITY: San Diego
STATE: California
NUMBER OF SEQUENCES: 11
                                                                                       CITY: San Diego
STATE: California
                                                                                                                                   COUNTRY: USA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       US-10-059-749-5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       US-09-944-851-6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Armstrong, Robert
Tomaselli, Kevin
TITLE OF INVENTION: Mch3, A No. US20020102648Alel Apoptotic Protease,
Nucleic Acids Encoding and Methods of Use
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Gaps
                                                                                                                                                                                                                                                                                           TITLE OF INVENTION: MCH4 AND MCH5, APOPTOTIC PROTEASE, NUCLEIC ACIDS ENCODING AND METHODS OF USE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Length 17;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        0; Indels
                                                                                                                                                                                                                                                                                                                                                                                ADDRESSEE: Seed Intellectual Property Law Group STREET: Suite 6300, 701 Fifth Avenue CITY: Seattle
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        COMPUTER: IBM PC Compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
APPLICATION NATA:
RILING DATE: 10-Sep-2001
CLASSIFICATION: <UNKNOWN>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Query Match
0.3%; Score 17; DB 1; Le
Best Local Similarity 100.0%; Pred. No. 3.8e+02;
Matches 17; Conservative 0; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ATTORNEY/AGENT INFORMATION:
NAME: Christiansen, William T.
REGISTRATION UNDRER: 44,614
REFERENCE/DOCKET NUMBER: 480140.424C4
TELECOMMUNICATION INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | NAME/KEY: misc feature | LOCATION: 1..17 | LOCATION: 1..17 | OTHER INFORMATION: /note= "SK-Zap" | SEQUENCE DESCRIPTION: SEQ ID NO: 6: US-09-952-768-6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Fernandes-Alnemri, Teresa
                                                                                                                   Sequence 6, Application US/09952768
Patent No. US20020035242Al
GENERAL INFORMATION:
APPLICANT: Alnemri, Emad S.
Fernandes-Alnemri, Teresa
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TELEPHONE: (206) 622-4900
TELEFAX: (206) 682-6031
INFORMATION FOR SEQ ID NO: 6:
SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            MEDIUM TYPE: Floppy disk
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Sequence 6, Application US/09944851
Patent No. US20020102648A1
GENERAL INFORMATION:
                                                                                                                                                                                                                                                        Armstrong, Robert
Tomaselli, Kevin
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          APPLICANT: Alnemri, Emad S.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Litwack, Gerald
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      LENGTH: 17 base pairs
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TYPE: nucleic acid
STRANDEDNESS: single
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        16 CAGGAATTCGGCACGAG 32
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1 caggaarrcggcacgag 17
           1 CAGGAATTCGGCACGAG 17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          COUNTRY: USA
ZIP: 98104
COMPUTER READABLE FORM:
                                                                                                                                                                                                                                                                                                                                           NUMBER OF SEQUENCES: 75
CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                       STATE: Washington
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TOPOLOGY: linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  RESULT 529
US-09-944-851-6
                                                                                                   US-09-952-768-6
                                                                              RESULT 528
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    g
```

ö

Gaps

```
APPLICANT: Holton, Timothy A.
APPLICANT: Michael, Michael Z.
APPLICANT: Michael, Michael Z.
TITLE OF INVENTION: GENETIC SEQUENCES ENCODING FLAVONOID PATHWAY ENZYMES
TITLE OF INVENTION: AND USES THEREFOR
FILE REFERENCE: 11658
CURRENT APPLICATION NUMBER: US/09/142,108C
CURRENT APPLICATION NUMBER: US/09/142,108C
FRIOR APPLICATION NUMBER: US/09/142,108C
FRIOR APPLICATION NUMBER: US/09/142,108C
FRIOR APPLICATION NUMBER: P998-09-01
FRIOR PILING DATE: 1998-09-01
NUMBER OF SEQ ID NOS: 45
SOFTWARE: Patentin Ver. 2.1
SEQ ID NO 28
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             FEATURE:

// OTHER INFORMATION: Description of Artificial Sequence:oligonucleotide
US-10-669-962-28
          NUCLEIC ACIDS ENCODING AND METHODS OF USE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Length 17;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             0; Indels
                                                                                 ADDRESSEE: Seed Intellectual Property Law Group STREET: Suite 6300, 701 Fifth Avenue
                                                                                                                                                                                                          ZIP: 98104

COMPUTER READABLE FORM:
MEDIUM TYPE: Ploppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.30
                                                                                                                                                                                                                                                                                                                                                          CURRENT APPLICATION DATA:

APPLICATION NUMBER: US/10/668,955
FILING DATE: 22-569-2003
CLASSIFICATION: 4Uhknown>
ATTORNEY/AGENT INFORMATION:
NAME: Laherty, Carol D.
REFEISINCE/DOCKET NUMBER: 480140.424D1
TELECOMMUNICATION INFORMATION:
TELECOMMUNICATION INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            0.3%; Score 17; DB 1; Lo
100.0%; Pred. No. 3.8e+02;
tive 0; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          OTHER INFORMATION: /note= "SK-Zap"
SEQUENCE DESCRIPTION: SEQ ID NO: 6:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Sequence 28, Application US/10669962
Publication No. US20090081264A1
MENBAL INFORMATION:
APPLICANT: Brugliera, Filippa
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      NAME/KEY: misc feature LOCATION: 1..17
OTHER INFORMATION: /not
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      682-6031
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             LENGTH: 17 base pairs
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               16 CAGGAATTCGGCACGAG 32
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           INFORMATION FOR SEQ ID NO: 6: SEQUENCE CHARACTERISTICS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TYPE: DNA ORGANISM: Artificial Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TYPE: nucleic acid
                                                       CORRESPONDENCE ADDRESS:
                                                                                                                                                        STATE: Washington
COUNTRY: USA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Query Match 0.3%
Best Local Similarity 100.0
Matches 17; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TELEPHONE: (20)
TELEFAX: (206)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     RESULT 533
US-10-669-962-28/C
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   FEATURE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            US-10-668-955-6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   APPLICANT: Alnemil Emad S.
APPLICANT: Alnemil Emad S.
APPLICANT: Alnemil Emad S.
APPLICANT: Itwack, Gerald
APPLICANT: Tomaselli, Kevin
TITLE OF INVENTION: MCI3, A NOVEL APOPTOTIC PROTEASE,
TITLE REFERENCE: 480140, 42322
CURRENT APPLICATION NUMBER: US/10/337,060
CURRENT FILING DATE: 2003-01-02
NUMBER OF SEQ ID NOS: 17
SOFTWARE: FastSEQ for Windows Version 4.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Armstrong, Robert
Tomaselli, Kevin
TITLE OF INVENTION: MCH4 AND MCH5, APOPTOTIC PROTEASE,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      0.3%; Score 17; DB 1; Length 17;
100.0%; Pred. No. 3.8e+02;
tive 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Query Match 0.3%; Score 17; DB 1; Length 17; Best Local Similarity 100.0%; Pred. No. 3.8e+02; Matches 17; Conservative 0; Mismatches 0; Indels
APPLICATION NUMBER: US/08/865,579
FILING DATE: 29-MAY-1997
ATTORNEY/AGENT INFORMATION:
NAME: Campbell, Cathryn A.
REGISTRATION NUMBER: 31,815
REFERENCE/DOCKET NUMBER: P-ID 2180
TELECOMMUNICATION INFORMATION:
TELEPAK: (619) 535-9001
TELEPAK: (619) 535-949
INFORMATION FOR SEQ ID NO: 5:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           APPLICANT: Alnemri, Emad S.
Fernandes-Alnemri, Teresa
Litwack, Gerald
                                                                                                                                                                                                                                                                                                                                                       TOPOLOGY: linear
MOLECULE TYPE: CDNA
SEQUENCE DESCRIPTION: SEQ ID NO: 5:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ; Sequence 6, Application US/10337060
; Publication No. US20030119169A1
; GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Sequence 6, Application US/10668955
Publication No. US20040054148A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ; FEATURE:
; OTHER INFORMATION: Primer SK-Zap
US-10-337-060-6
                                                                                                                                                                                                                                                                                                        TYPE: nucleic acid
STRANDEDNESS: single
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         16 CAGGAATTCGGCACGAG 32
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            16 CAGGAATTCGGCACGAG 32
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TYPE: DNA
ORGANISM: Artificial Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Best Local Similarity 100.
Matches 17; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                    US-10-059-749-5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     RESULT 532
US-10-668-955-6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 SEQ ID NO 6
LENGTH: 17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         g
```

Сарв

셤 8

```
GENERAL INFORMATION:
APPLICANT: Siran Therapeutics, Inc.
APPLICANT: Habberli, Peter
APPLICANT: Habberli, Peter
APPLICANT: Habberli, Peter
APPLICANT: Habberli, Peter
APPLICANT: Hospitali, Peter
APPLICANT: McSwiggen, James
TITLE OF INVENTION: RNA Mediated Inhibition Fatty Acid Synthase (FAS) and Fatty Acids
TITLE OF INVENTION: NUMBER: Ligand (SINA)
TITLE OF INVENTION: NUMBER: US/10/871,222
CURRENT APPLICATION NUMBER: US/10/871,222
CURRENT FILING DATE: 2004-06-18
FRIOR FILING DATE: 2004-06-18
FRIOR FILING DATE: 2004-01-14
FRIOR FILING DATE: 2004-01-14
FRIOR FILING DATE: 2003-10-23
FRIOR PAPLICATION NUMBER: US/10/693059
FRIOR FILING DATE: 2003-02-20
FRIOR FILING DATE: 2003-02-23
FRIOR FILING DATE: 2003-02-20
FRIOR PAPLICATION NUMBER: PCT/US03/05028
FRIOR FILING DATE: 2003-02-20
FRIOR PAPLICATION NUMBER: US/6935880
FRIOR FILING DATE: 2003-02-20
FRIOR FILING DATE: 2003-03-11
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence: Target Sequence/sinA sense re
US-10-871-222-150
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ; OTHER INFORMATION: Description of Artificial Sequence: sinA antisense region US-10-871-222-300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Remaining Prior Application data removed - See File Wrapper or PALM. NUMBER OF SEQ ID NOS: 706
PRIOR FILING DATE: 2003-02-20
PRIOR APPLICATION NUMBER: PCT/US03/05028
PRIOR FILING DATE: 2003-02-20
PRIOR APPLICATION NUMBER: US60/358580
PRIOR FILING DATE: 2002-02-20
PRIOR FILING DATE: 2002-03-11
PRIOR FILING DATE: 2002-03-11
Remaining Prior DATE: 2002-03-13
Remaining Prior DATE: 2002-03-13
Remaining Prior DATE: 2002-03-13
SEQ ID NOS: 706
SOFTWARE: Patentin version 3.3
SEQ ID NO 150
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Length 19;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Query Match 0.3%; Score 17; DB 1; Length 19;
Best Local Similarity 94.1%; Pred. No. 4.2e+02;
Matches 16; Conservative 1; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           DB 1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                0.3%; Score 17;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Sequence 300, Application US/10871222 Publication No. US20050119212A1 GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                5023 GTAAAAAAAAAAAA 5039
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     3 GUAAAAAAAAAAAAA 19
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    NUMBER OF SEQ ID NOS: 706
SOFTWARE: Patentin version 3.3
SEQ ID NO 300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ORGANISM: Artificial Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        LENGTH: 19
TYPE: RNA
ORGANISM: Artificial Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              US-10-871-222-300/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              US-10-871-222-150

Sequence 150, Application US/10871222

Publication No. US20050119212A1

GENERAL INFORMATION:

APPLICANT: Sirna Therapeutics, Inc.

APPLICANT: Haberli, Peter

APPLICANT: Haberli, Peter

APPLICANT: McSwiggen, James

TITLE OF INVENTION: RNA Mediated Inhibition Fatty Acid Synthase (FAS) and Fatty Acid

TITLE OF INVENTION: RNA Mediated Inhibition Fatty Acid Synthase (FAS) and Fatty Acid

TITLE OF INVENTION: RNA Mediated Inhibition Fatty Acid Synthase (FAS)

TITLE OF INVENTION: NUCLEIC Acid (SINA)

FILE REPERENCE: 400/164 (MRH064-487)

CURRENT APPLICATION NUMBER: US/10/871,222

CURRENT PILING DATE: 2004-06-18

PRIOR APPLICATION NUMBER: US/10/871,222

CURRENT APPLICATION NUMBER: US/10/871,222

CURRENT APPLICATION NUMBER: US/10/871,222

FRIOR PILING DATE: 2004-01-14

PRIOR APPLICATION NUMBER: US/10/20448

PRIOR FILING DATE: 2003-11-24

PRIOR APPLICATION NUMBER: US/10/83059

PRIOR FILING DATE: 2003-11-24

PRIOR PILING DATE: 2003-11-24
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Sequence 29, Application US/10669962
; Sequence 29, Application US/10669962
; Publication No. US20050081264A1
; GENERAL INFORMATION:
; APPLICANT: Brugaliera, Filippa
; APPLICANT: Holten, Timothy A.
; TITLE OF INVENTION: GENETIC SEQUENCES ENCODING FLAVONOID PATHWAY ENZYMES
; TITLE OF INVENTION: GENETIC SEQUENCES ENCODING FLAVONOID PATHWAY ENZYMES
; TITLE OF INVENTION: AND USBES THEREFOR
; TITLE OF INVENTION: AND USBES: US/10/669,962
; CURRENT FILING DATE: 1298-09-01
; PRIOR APPLICATION NUMBER: US/09/142,108C
; PRIOR PILING DATE: 1996-03-01
; PRIOR FILING DATE: 1996-03-01
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ó;
                                                                                                                                                                                      ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ; OTHER INFORMATION: Description of Artificial Sequence:oligonucleotide US-10-669-962-29
                                                                                                                                                                                      Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ö
                                                                                                                                                                                          ;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Query Match 0.3%; Score 17; DB 1; Length 18; Best Local Similarity 100.0%; Pred. No. 4e+02; Matches 17; Conservative 0; Mismatches 0; Indels
                                                                                                 ch 0.3%; Score 17; DB 1; Length 18; 1 Similarity 100.0%; Pred. No. 40+02; 17; Conservative 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              5025 AAAAAAAAAAAAAA 5041
                                                                                                                                                                                                                                                                                        5025 AAAAAAAAAAAAAA 5041
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  17 AAAAAAAAAAAAAA 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ORGANISM: Artificial Sequence
                                                                                                                                                                                                                                                                                                                                             17 AAAAAAAAAAAAAA 1
                                                                                                          Query Match
Best Local Similarity
Matches 17; Conserval
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ò
```

셤

ઠે

```
Sequence 10, Application US/10140355A
| Publication No. US20030207831A1
| GENERAL INCPRANTION:
| APPLICANT: Brett P. Monia
| APPLICANT: Brett P. Monia
| APPLICANT: Brett P. Monia
| APPLICANT: BLOWERTON: ANY ISBNE MODULATION OF TELOMERIC REPEAT BINDING FACTOR 2
| TITLE OF INVENTION: ANY ISBNE MODULATION OF TELOMERIC REPEAT BINDING FACTOR 2
| TITLE OF INVENTION: EXPRESSION
| FILE REFERENCE: RTSP-0082
| CURRENT APPLICATION NUMBER: US/10/148,355A
| CURRENT FILING DATE: 2002-09-30
| PRIOR FILING DATE: 1999-12-17
| NUMBER OF SEQ ID NOS: 89
| SEQ ID NO 10
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ö
                                                                                       COMPUTER READABLE FORM:

MEDIUM TYPE: Floppy disk

CCMPUTER: IEBM PC compatible

CCMPUTER: IEBM PC compatible

CCMPUTER: IEBM PC compatible

OPERATING SYSTEM: PC-DOS/NS-DOS

SOFTWARE: Patentin Release #1.0, Version #1.25

CURRENT APPLICATION DATA:

APPLICATION NUMBER: US/10/271,344

FILING DATE: 14-Oct-2002

CLASSIFICATION NUMBER: US/08/809,423A

FILING DATE: -UNFNOWN-

ATTORNEY/AGENT INFORMATION:

NAME: CONNELL, GARY J.

REGISTRATION NUMBER: 2618-17-C2PCT

TELECOMMUNICATION INFORMATION:

TELECOMMUNICATION FOR SEQ ID NO: 23:

SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Length 20;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Length 20;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Query Match
0.3%; Score 17; DB 1; Le
Best Local Similarity 100.0%; Pred. No. 4.4e+02;
Matches 17; Conservative 0; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  0.3%; Score 17; DB 1; Le
100.0%; Pred. No. 4.4e+02;
tive 0; Mismatches 0;
       STREET: 1700 Lincoln Street, Suite 3500
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        OTHER INFORMATION: Antisense Oligonucleotide
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TOPOLOGY: linear:
; MOLECULE TYPE: DNA (primer)
; SEQUENCE DESCRIPTION: SEQ ID NO: 23:
US-10-271-344-23
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      5069 AGGGGGGCCCGGTACC 5085
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      LENGTH: 20 base pairs
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TYPE: nucleic acid
STRANDEDNESS: single
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  18 GGAATTCGGCACGAGGG 34
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TYPE: DNA ORGANISM: Artificial Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     20 AGGGGGGCCCGGTACC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Best Local Similarity 100.
Matches 17; Conservative
                            CITY: Denver
STATE: Colorado
COUNTRY: U.S.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             RESULT 539
US-10-148-355A-10/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 US-10-148-355A-10
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ઠે
                            ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ö
                              Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Gapa
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      RESULT 538
US-10-271-344-23/C
is Sequence 23, Application US/10271344
is Publication No. US20030185755A1
is GENERAL INPORMATION:
HUNTER, SHIRLEY WU
WALLENBELS, LYNDA
it WALLENBELS, LYNDA
it TITLE OF INVENTION: NOVEL ECTOPARASITE SALIVA PROTEINS
                            ;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ö
                                                                                                                                                                                                                                       Sequence 23, Application US/08809423A
Publication No. US20020169104A1
GENERAL INFORMATION:
APPLICANT: FRANK, GLENN R.
APPLICANT: HUNTER, SHIRLEY WU
APPLICANT: WALLENPELS, LYNDA
ITILE OF INVENTION: NOVEL ECTOPARASITE SALIVA PROTEINS
ITILE OF INVENTION: AND APPARATUS TO COLLECT SUCH PROTEINS
CORRESPONDENCE ADDRESS:
CORRESPONDENCE ADDRESS:
ADDRESSEE: Sheridan Ross & McIntosh
STREET: 1700 Lincoln Street, Suite 3500
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Query Match 0.3%; Score 17; DB 1; Length 20; Best Local Similarity 100.0%; Pred. No. 4.4e+02; Matches 17; Conservative 0; Mismatches 0; Indels
                            Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: I BUR PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/809,423A
FILING DATE:
Pred. No. 4.2e+02;
; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CORRESPONDENCE ADDRESS:
ADDRESSEE: Sheridan Ross & McIntosh
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CLASSIFICATION:
ATTORNEY, AGENT INFORMATION:
NAME: CONNELL, GARY J.
REGISTRATION NUMBER: 32,020
TREFRENCE/DOCKET NUMBER: 2618-17-C2PCT
TELECOMUNICATION INFORMATION:
TELECHONE: (303) 863-9700
Best Local Similarity 100.0%; P
Matches 17; Conservative 0;
                                                                        5023 GTAAAAAAAAAAAA 5039
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             5069 AGGGGGGCCCGGTACC 5085
                                                                                                                        17 GTAAAAAAAAAAAA 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           20 AGGGGGGCCCGGTACC 4
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      MOLECULE TYPE: DNA (primer)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TELEPAX: (303) 863-0223
INFORMATION FOR SEQ ID NO: SEQUENCE CHARACTERISTICS:
LENGTH: 20 base pairs
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TYPE: nucleic acid
STRANDEDNESS: single
TOPOLOGY: linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CITY: Denver
STATE: Colorado
COUNTRY: U.S.A.
                                                                                                                                                                                                                          US-08-809-423A-23/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             US-08-809-423A-23
```

g

ò

ö

d

```
ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              APPLICANT: Sampath, Rangarajan
APPLICANT: Sampath, Rangarajan
APPLICANT: Freier, Susan M.
APPLICANT: Massire, Christian
APPLICANT: Hofstadler, Steven A.
APPLICANT: Lowert, Kristin Sannes
APPLICANT: Banet, C. Frank
APPLICANT: Bennett, C. Frank
APPLI
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      .
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Query Match 0.3%; Score 16.8; DB 1; Length 20; Best Local Similarity 90.0%; Pred. No. 4.5e+02; Matches 18; Conservative 0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Query Match 0.3%; Score 16.8; DB 1; Length 20; Best Local Similarity 90.0%; Pred. No. 4.5e+02; Matches 18; Conservative 0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                            FEATURE:
; OTHER INFORMATION: Antisense Oligonucleotide
US-10-667-022-72
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        COKREMY FILING DATE: 2003-04-28
PRIOR PELING DATE: 2003-04-28
PRIOR PELING DATE: 2003-04-28
PRIOR PLING DATE: 2003-05-05
PRIOR PLING DATE: 2003-05-06
PRIOR PLING DATE: 2003-04-30
PRIOR PLING DATE: 2003-04-30
PRIOR PILING DATE: 2003-04-30
PRIOR PILING DATE: 2003-06-06
PRIOR PILING DATE: 2003-06-10
PRIOR PILING DATE: 2003-06-10
PRIOR PLING DATE: 2003-06-10
TITLE OF INVENTION: P150 EXPRESSION FILE REFERENCE: RTS-0376 CURRENT APPLICATION NUMBER: US/10/667,022 CURRENT FILING DATE: 2003-09-18 NUMBER OF SEQ ID NOS: 147 SEQ ID NO 72 LENGTH: 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Sequence 29728, Application US/10831901A Publication No. US20050100885A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CTHER INFORMATION: Antisense compound US-10-831-901A-29728
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       5022 TGTAAAAAAAAAAAAAAA 5041
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     3969 TITAAAGCATGATTTAAAGT 3988
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1 Trraaarcargcrrraaagr 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               rgacaaaaaaaaaaaaaa 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ORGANISM: Artificial Sequence
                                                                                                                                                                                                                                                                                            TYPE: DNA ORGANISM: Artificial Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      APPLICANT: Crooke, Stanley T. APPLICANT: Ecker, David J.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      US-10-831-901A-29728/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 SOFTWARE: FastSI
SEQ ID NO 29728
LENGTH: 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          RESULT 543
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  d
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              US-10-667-022-72
) Sequence 72, Application US/10667022
) Sequence 72, Application US/10667022
) Publication No. US20040063657A1
) GENERAL INFORMATION:
APPLICANT: Stanan M. Freier
) APPLICANT: Kenneth W. Dobie
) TITLE OF INVENTION: ANTISENSE MODULATION OF PHOSPHOINOSITIDE-3-KINASE, REGULATORY SUB
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Sequence 7.2 Application US/10160786

Publication No. US20030225013A1

GENERAL INFORMATION:
GENERAL INFORMATION:
APPLICANT: SUSAN Freier
APPLICANT: SUSAN ANTISENSE MODULATION OF PHOSPHOINOSITIDE-3-KINASE, REGULATORY SUB-
TITLE OF INVENTION: ANTISENSE MODULATION OF PHOSPHOINOSITIDE-3-KINASE, REGULATORY SUB-
TITLE OF INVENTION: P150 EXPRESSION
FILE REFERENCE: RTS-0376
CURRENT APPLICATION NUMBER: US/10/160,786
CURRENT PILING DATE: 2002-05-31
NUMBER OF SEQ ID NOS: 147
SEQ ID NO 72
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Query Match 0.3%; Score 16.8; DB 1; Length 20; Best Local Similarity 90.0%; Pred. No. 4.5e+02; Matches 18; Conservative 0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Score 17; DB 1; Length 22;
Pred. No. 4.7e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          0; Indels
                                                                                                                                                                                                                                                                                                                                                                         APPLICANT: Espinosa, Joaquin
TITLE OF INVENTION: ASSAVE FOR p53 FUNCTION IN CELLS
FILE REPERENCE: SALKINS. 058A
CURRENT APPLICATION NUMBER: US/10/397,131
CURRENT PILING DATE: 2003-03-24
PHIOR APPLICATION NUMBER: US 60/366,897
PRIOR FILING DATE: 2002-03-22
SOFTWARE: FastSEQ for Windows Version 4.0
SEQ ID NO 7
LENGTH: 22
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ; OTHER INFORMATION: Antisense Oligonucleotide US-10-160-786-72
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Query Match 0.3%; Score 17; DB Best Local Similarity 100.0%; Pred. No. 4.7 Matches 17; Conservative 0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  3969 TTTAAAGCATGATTTAAAGT 3988
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              rrraaarcarccrrraaacr 20
                                                                                                                                                                                                                    Sequence 7, Application US/10397131; Publication No. US20030228627A1; GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           9 CGGGCTGCAGGAATTCG 25
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1 CGGCTGCAGGAATTCG 17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TYPE: DNA ORGANISM: Artificial Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TYPE: DNA
ORGANISM: Artificial Sequence
                                    20 GGAATTCGGCACGAGGG 4
                                                                                                                                                                                                                                                                                                                                            APPLICANT: Emerson, Beverly M.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ; OTHER INFORMATION: primer US-10-397-131-7
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       RESULT 541
US-10-160-786-72
                                                                                                                                                                                        US-10-397-131-7
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      RESULT 542
```

å

ઠે g

```
APPLICANT: 0'Toole, Margot
; APPLICANT: 0'Toole, Margot
; TITLE OF INVENTION: COMPOSITIONS AND METHODS FOR DIAGNOSING AND TREATING AUTOIMMUNE
; TITLE OF INVENTION: DISBASES
; FILE REFERENCE: 031896-023000 (AM101331L)
; CURRENT APPLICATION NUMBER: US/10/786,720
; CURRENT APPLICATION NUMBER: US/10/786,720
; NUMBER OF SEQ ID NOS: 21135
; SOFTWARE: Patentin version 3.2
; SEQ ID NO 12304
; LENTH: 21
TYDE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           APPLICANT: 0.0 Toole, Margot
APPLICANT: Liu, Wei
TITLE OF INVENTION: COMPOSITIONS AND METHODS FOR DIAGNOSING AND TREATING AUTOIMMUNE
TITLE OF INVENTION: DISEASES
TITLE OF INVENTION UNDER: US.10,786,720
CURRENT APPLICATION NUMBER: US.10,786,720
CURRENT FILING DATE: 2004-02-26
NUMBER OF SEQ ID NOS: 21135
SEQ ID NO 114
LENGTH: 21
                                                                                                                                                                                                                                                                                      ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ô
                                                                                                                                                                                                                                                                                    Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ö
                                                                                                                                                                                                                                                                                      ..
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ö
                                                                                                                                                                                                                                Score 16.8; DB 1; Length 21;
Pred. No. 4.7e+02;
0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Query Match
0.3%; Score 16.8; DB 1; Length 21;
Best Local Similarity 70.0%; Pred. No. 4.7e+02;
Matches 14; Conservative 4; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Score 16.8; DB 1; Length 21;
Pred. No. 4.7e+02;
0; Mismatches 2; Indels
CURRENT APPLICATION NUMBER: US/10/786,720 CURRENT FILING DATE: 2004-02-26 NUMBER OF SEQ ID NOS: 21135 SEQ ID NO 112 LENGTH: 21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ; Sequence 114, Application US/10786720; Publication No. US20040191818A1; GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                847 GCATCTGAGAAAGCAGCTAT 866
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  847 GCATCTGAGAAAGCAGCTAT 866
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1 GCAUCUAAUAAAGCAGCUAU 20
                                                                                                                                                                                                                                                                                                                                                                            21 GCATCTAATAAGCAGCTAT 2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ) TYPE: RNA
; ORGANISM: RNAi-antiBense strand
US-10-786-720-114
                                                                                                                                                                                                                                   Query Match
Best Local Similarity 90.0%;
Matches 18; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      0.3%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Query Match
Best Local Similarity 90.0
Matches 18; Conservative
                                                                                                                                        TYPE: DNA
CORGANISM: Homo sapiens
US-10-786-720-112
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TYPE: DNA
ORGANISM: Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          US-10-786-720-12304
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      US-10-786-720-114
                                                                                                                                                                                                                                                                                                                                  à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Sequence 112, Application US/10786720
Publication No. US20040191818A1
GENERAL INFORMATION:
APPLICANT: Wyeth
APPLICANT: D'Toole, Margot
APPLICANT: Liu, Wei
TITLE OF INVENTION: DISBASES
FILE REFERENCE: 031896-023000 (AM101331L)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Query Match 0.3%; Score 16.8; DB 1; Length 21; Best Local Similarity 90.0%; Pred. No. 4.7e+02; Matches 18; Conservative 0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Query Match
0.3%; Score 16.8; DB 1; Length 21;
Best Local Similarity 90.0%; Pred. No. 4.7e+02;
Matches 18; Conservative 0; Mismatches 2; Indels
                                    Sequence 21, Application US/10274095
| Publication No. US20030120433A1
| GENERAL INFORMATION No. WS20030120433A1
| GENERAL INFORMATION: Methods for Predicting Transcription TITLE OF INVENTION: Methods for Predicting Transcription TITLE OF INVENTION: Methods for Predicting Transcription CURRENT APPLICATION NUMBER: US/10/274,095
| CURRENT APPLICATION NUMBER: 00/329,961
| PRIOR APPLICATION NUMBER: 60/329,961
| PRIOR PILING DATE: 2001-10-17
| PRIOR PILING DATE: 2001-10-17
| NUMBER OF SEQ ID NOS: 48
| SOFTWARE: FastSEQ for Windows Version 3.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Sequence 12, Application US/10666980
Publication No. US20040133929A1
GENERAL INFORMATION:
TITLE OF INVENTION: Animal Model for Preeclampsia
FILE REFERENCE: P05473US01
CURRENT APPLICATION NUMBER: US/10/666,980
CURRENT FILING DATE: 2003-09-19
PRIOR FILING DATE: 2002-09-19
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         4591 CAGGGCTTCATCGTAACTGC 4610
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                3078 ACAAGAACCAGATGACAAAC 3097
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1 cacccricarcerracace 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ACAAGAACCAGATCACATAC 21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   NUMBER OF SEQ ID NOS: 16
SOFTWARE: Patentin version 3.2
SEQ ID NO 12
LENGTH: 21
                                                                                                                                                                                                                                                                                                                                                                                                                        TYPE: DNA ORGANISM: Artificial Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ; OTHER INFORMATION: primer US-10-274-095-21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ; ORGANISM: Mus musculus
US-10-666-980-12
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            RESULT 546
US-10-786-720-112/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              RESULT 545
US-10-666-980-12
                                                                                                                                                                                                                                                                                                                                                                         SEQ ID NO 21
LENGTH: 21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TYPE: DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         FEATURE:
```

ò 셤

g ò

```
Sequence 18930, Application US/10751736

Sequence 18930, Application US/10751736

Publication No. US20040265230A1

SCHWEAL INFORMATION:

APPLICANT: Wyeth

APPLICANT: Wath

APPLICANT: Brown, Eugene

APPLICANT: Liu, Wei

TITLE OF INVENTION: COMPOSITIONS AND METHODS FOR DIAGNOSING AND TREATING COLON

TITLE OF INVENTION: CANCERS

FILE REFERENCE: AM100927 (031896-002000)

CURRENT APPLICATION NUMBER: US/10/751,736

CURRENT APPLICATION NUMBER: US Provisional Application 60/438,000

PRIOR FILING DATE: 2003-01-06

NUMBER OF SEQ ID NOS: 54873

SOFTWARE: Patentin version 3.2

SEQ ID NO 18930
             APPLICANT: Matinez, Robert
APPLICANT: Matinez, Robert
APPLICANT: Exown, Eugene
APPLICANT: Liu, Wei
TITLE OF INVENTION: COMPOSITIONS AND METHODS FOR DIAGNOSING AND TREATING COLON
TITLE OF INVENTION: CAMPOSITION CAMPOSITY
FILE REPRENCE: AM100927 (031896-002000)
CURRENT FILING DATE: 2003-01-06
FRIOR APPLICATION NUMBER: US Provisional Application 60/438,000
PRIOR PILING DATE: 2003-01-06
NUMBER OF SEQ ID NOS: 54873
SOFTWARE: Patentin version 3.2
SEQ ID NO 14784
LENGTH: 21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  US-10-751-736-36929/c
| Sequence 36929, Application US/10751736
| Publication No. US20040265230A1
| GENERAL INFORMATION:
| APPLICANT: Wyeth
| APPLICANT: Brown, Eugene
| APPLICANT: Liu, Wei
| APPLICANT: Liu, COMPOSITIONS AND METHODS FOR DIAGNOSING AND TREATING COLON
| TITLE OF INVENTION: CANCERS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ..
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       0.3%; Score 16.8; DB 1; Length 21; 90.0%; Pred. No. 4.7e+02; iive 0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Query Match 0.3%; Score 16.8; DB 1; Length 21; Best Local Similarity 90.0%; Pred. No. 4.7e+02; Matches 18; Conservative 0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                2915 AGGAAGACAAACTICTGGCA 2934
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  2905 ACAGAGGAAGAGGAAGACAA 2924
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 21 AGGAAGAACACTTCTGGCA 2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              20 ACAGAGGAAGTGTAAGACAA 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Query Match
Best Local Similarity 90.04
Matches 18; Conservative
GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ; TYPE: RNA
; ORGANISM: RNAi
US-10-751-736-18930
                                                                                                                                                                                                                                                                                                                                                                                                 ; TYPE: RNA
; ORGANISM: RNAi
US-10-751-736-14784
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               RESULT 553
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Sequence 5549, Application US/10751736

| Sequence 5549, Application US/10751736
| Publication No. US20040265230A1
| Publication No. US20040265230A1
| APPLICANT: Wyeth
| APPLICANT: Martinez, Robert
| APPLICANT: Brown, Eugene
| APPLICANT: Liu, Wei
| TITLE OF INVENTION: CANCEST
| FILE REPERENCE: AAA.00927 (031896-002000)
| CURRENT APPLICATION NUMBER: US/10/751,736
| PRIOR PILING DATE: 2003-01-06
| PRIOR FILING DATE: 2003-01-06
| NUMBER OF SEQ ID NOS: 54873
| SEQ ID NO 5549
| LENGTH: 21
                                                                                                                                                                                                                                                                                                 APPLICANT: O'Toole, Margot
APPLICANT: 110, Wei
TITLE OF INVENTION: COMPOSITIONS AND METHODS FOR DIAGNOSING AND TREATING AUTOIMMUNE
TITLE OF INVENTION: DISEASES
FILE REPERENCE: 031896-023000 (AMI01331L)
CURRENT APPLICATION NUMBER: US/10/786,720
CURRENT FILING DATE: 2004-02-26
NUMBER OF SEQ ID NOS: 21135
SOFTWARE: PATENTIN VERSION 3.2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              0.3%; Score 16.8; DB 1; Length 21; 90.0%; Pred. No. 4.7e+02; tive 0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Query Match 0.3%; Score 16.8; DB 1; Length 21; Best Local Similarity 70.0%; Pred. No. 4.7e+02; Matches 14; Conservative 4; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ; Sequence 14784, Application US/10751736
; Publication No. US20040265230A1
                                                                                                                                                    RESULT 549
US-10-786-720-12306
; Sequence 12306, Application US/10786720
; Publication No. US20040191818A1
; GENERAL INFORMATION:
; APPLICANT: Wyeth
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1912 AAAGAGGTTCCTCGTAATGA 1931
                            2124 TACACATCCAAATGGAAATT 2143
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   2124 TACACATCCAAATGGAAATT 2143
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1 UACACAUCCAAAUGCAAACU 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                21 AAAGAGGTTCCTTGAAATGA 2
                                                         21 TACACATCCAAATGCAAACT 2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TYPE: RNA
, ORGANISM: RNAi-antisense strand
US-10-786-720-12306
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Query Match
Best Local Similarity 90.0
Matches 18; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           RESULT 551
US-10-751-736-14784/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ; TYPE: RNA
; ORGANISM: RNAi
US-10-751-736-5549
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 SEQ ID NO 12306
LENGTH: 21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ઠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     셤
                                                                           셤
                                 ઠ
```

```
ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            셤
                                                                                                                                                                                                                                                                                                                                       ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ö
FILE REFERENCE: AM100927 (031896-002000)

CURRENT APPLICATION NUMBER: US/10/751,736

CURRENT FILING DATE: 2003-01-06

PRIOR APPLICATION NUMBER: US Provisional Application 60/438,000

PRIOR PILING DATE: 2003-01-06

NUMBER OF SEQ ID NOS: 54873

SEC ID NO 36929

LENGTH: 21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Sequence 52, Application US/09972175
Publication No. US20030101482A1
GENERAL INFORMATION:
GENERAL OF THE OF TRANSCENE APPLICANT: Baum, James A.
Mettus, Amy Jelen
Mettus, Anne-Marie Light
TITLE OF INVENTION: LEPIDOPTERAN-ACTIVE-DELTA-ENDOTOXINS
                                                                                                                                                                                                                                                                                       0.3%; Score 16.8; DB 1; Length 21; 90.0%; Pred. No. 4.7e+02; tive 0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Length 22;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
PRPLICATION NUMBER: US/09/972,175
FILING DATE: 05-Oct-2001
CLASSIFICATION: <unknown>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Score 16.8; DB 1;
Pred. No. 4.9e+02;
0; Mismatches 2;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     NUMBER OF SEQUENCES: 76
CORRESPONDENCE ADDRESS:
ADDRESSEE: Arnold White & Durkee
STREET: P.O. Box 4433
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ATTORNEY/AGENT INFORMATION:
NAME: Kitchell, Barbara S.
REGISTRATION NUMBER: 33,928
REFERENCE/DOCKET NUMBER: MECO:206
TELECOMMUNICATION INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            PRIOR APPLICATION DATA:
APPLICATION NUMBER: 09/337,635
PILING DATE: <Unknown>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   SEQUENCE DESCRIPTION: SEQ ID NO: 52:
                                                                                                                                                                                                                                                                                                                                                                             802 AATTCTGCACAGAATTGTCT 821
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TELEPHONE: 512/418-3000
TELEFAX: 512/474-7577
INFORMATION FOR SEQ ID NO: 52:
                                                                                                                                                                                                                                                                                                                                                                                                                    21 AATTCTTCACAGCATTGTCT 2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TYPE: nucleic acid
STRANDEDNESS: single
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ZIP: 77210
COMPUTER READABLE FORM:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Query Match
Best Local Similarity 90.03
Matches 18; Conservative
                                                                                                                                                                                                                                                                                                       Best Local Similarity 90.0 Matches 18; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CITY: Houston
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        COUNTRY: USA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 STATE: Texas
                                                                                                                                                                                                                                          JS-10-751-736-36929
                                                                                                                                                                                                    TYPE: RNA
ORGANISM: RNAi
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     RESULT 554
US-09-972-175-52
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       US-09-972-175-52
                                                                                                                                                                                                                                                                                          Query Match
                                                                                                                                                                                                                                                                                                                                                                             ð
```

```
# PERIOR APPLICANT ON SUBJECTION OF US20030195336A1

| GENERAL INFORMATION: |
| APPLICANT: Baum, James A. |
| APPLICANT: Gilmer, Amy Jelen |
| APPLICANT: Gilmer, Amy Jelen |
| APPLICANT: MILE OF UNCENTION: WILL OF TITLE OF INVENTION: WILLE OF TOTO AND POLYPEPTIDE COMPOSITIONS ENCODING LEPIDOPTERAN-TO TITLE OF INVENTION: WOLFFETDES |
| FILE REFERENCE: MECO: 13 (11792.0213 DVUS01) |
| CURRENT APPLICATION NUMBER: 08/10/200,522 |
| CURRENT FILING DATE: 1999-06-22 |
| PRIOR FILING DATE: 1999-06-22 |
| PRIOR PAPLICATION NUMBER: 08/980,071 |
| PRIOR APPLICATION NUMBER: 08/980,071 |
| PRIOR APPLICATION NUMBER: 08/980,071 |
| PRIOR APPLICATION NUMBER: 08/980,071 |
| PRIOR FILING DATE: 1996-11-27 |
| NUMBER OF SEQ ID NOS: 76 |
| SEQ ID NO S: 76 |
| SEQ ID NO S: 22 |
| LENGTH: 22 |
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Gequence 52, Application US/1085535
Fublication No. US20040221334A1
GENERAL INFORMATION:
APPLICANT: Baum, James A.
APPLICANT: Gilmer, Amy Jelen
APPLICANT: Milmer, Ame Marie Light
ITLE OF INVENTION: And Methods of Use (Amended)
ITLE OF INVENTION: AND WINSER: US/10/855,535
CURRENT FILING DATE: 1999-06-27
PRIOR PELICATION NUMBER: 09/337,635
PRIOR PILING DATE: 1999-11-26
PRIOR PELICATION NUMBER: 08/757,536
PRIOR PILING DATE: 1996-11-27
NUMBER OF SEQ ID NOS: 76
SEQ ID NO 5: 76
LENGTH: 22
LENGTH: 22
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Сарв
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ô
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Length 22;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Length 22;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Indela
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Score 16.8; DB 1;
Pred. No. 4.9e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Query Match 0.3%; Score 16.8; DB 1;
Best Local Similarity 90.0%; Pred. No. 4.9e+02;
Matches 18; Conservative 0; Mismatches 2;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         FEATURE:

JOTHER INFORMATION: Synthetic oligonucleotide
US-10-200-522-52
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ; OTHER INFORMATION: Synthetic oligonucleotide US-10-855-535-52
                                                                                                                                         Sequence 52, Application US/10200522
Publication No. US20030195336A1
1 GGATCCCTCGAGCTGCAGGA 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1 ddarccrcdadcrdcadda 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   0.3%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TYPE: DNA
ORGANISM: Artificial Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TYPE: DNA ORGANISM: Artificial Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Query Match
Best Local Similarity
```

```
, OTHER INFORMATION: Description of Artificial Sequence: an artificially synthesized pr
US-10-108-260A-4995
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ö
                                                                                                                                                                                                                                                                                                                                                                                        ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Gaps
                                                                                                                                                                                                                                                                                                                                                                                           Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ô
                                                                                                                                                                                                                                                                                                                                                                                           .
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Sequence 4995, Application US/10108260A
; Publication No. US20040005560A1
; GENERAL INFORMATION:
    APPLICANT: HELLX RESEARCH INSTITUTE
; TITLE OF INVENTION: No. US20040005560A1e1 full length cDNA
    FILE REFERENCE: H1-A0106
; CURRENT APPLICATION NUMBER: US/10/108,260A
; CURRENT FILING DATE: 2002-03-27
; NUMBER OF SEQ ID NOS: 5458
; SOFTWARE: Patentin Ver. 2.1
; SEQ ID NO 4995
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Query Match

0.3%; Score 16.4; DB 1; Length 18;
Best Local Similarity 94.4%; Pred. No. 4.4e+02;
Matches 17; Conservative 0; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                                                                Length 22;
                                                                                                                                                                                                                                                                                                                                                                                           Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       APPLICANT: Roch, Matthew E.
APPLICANT: Lizardi, Paul M.
APPLICANT: Lizardi, Paul M.
APPLICANT: Latimer, Darin R.
TITLE OF INVENTION: Binary Encoded Sequence Tags
FILE REFERENCE: AGL 100
CURENT APPLICATION NUMBER: US/10/872,984
CURENT FILING DATE: 2004-06-21
PRIOR APPLICATION NUMBER: US/09/994,311
PRIOR APPLICATION NUMBER: US/09/637,751
PRIOR PILING DATE: 2000-08-11
PRIOR SEQ ID NOS: 10
SOFTWARE: Patentin Ver. 2.1
                                                                                                                                                                                                                                                                                                                                        Query Match 0.3%; Score 16.8; DB 1; Best Local Similarity 90.0%; Pred. No. 4.9e+02; Matches 18; Conservative 0; Mismatches 2;
                                                                                                                                                                                                                                                                            OTHER INFORMATION: Synthetic oligonucleotide
                   PRIOR APPLICATION NUMBER: 08/980,071
PRIOR FILING DATE: 1997-11-26
PRIOR FILING DATE: 1996-11-27
NUMBER OF SEQ ID NOS: 76
SOFTWARE: Patentin version 3.3
SEQ ID NO 5.2
LENGTH: 22
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Sequence 5, Application US/10872984; Publication No. US20040265888A1; GENERAL INFORMATION: APPLICANT: Kaufman, Joseph C.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            3813 CCATCTTACAAAGCAG 3830
                                                                                                                                                                                                                                                                                                                                                                                                                                        1 GGATCCCCCGGGCTGCAGGA 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1 GGATCCCTCGAGCTGCAGGA 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1 ccarccrcracacacas 18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TYPE: DNA
ORGANISM: Artificial Sequence
                                                                                                                                                                                                              TYPE: DNA
ORGANISM: Artificial Sequence
PRIOR FILING DATE: 1999-06-22
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 JS-10-108-260A-4995
                                                                                                                                                                                                                                                                                                       US-10-999-188-52
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Sequence 52, Application US/10999188
Publication No. US20050155103A1
GENERAL INFORMATION:
GENERAL INFORMATION:
GENERAL INFORMATION:
APPLICANT: Baum, James A.
APPLICANT: Gilmer, Anne Marie Light
TITLE OF INVENTION: Methods for Generating Lepidopteran-Toxic Polypeptides (Amended)
FILE REPERBNCE: 11792.0213 DVUS02
CURRENT FILING DATE: 2004-11-29
PRIOR APPLICATION NUMBER: 10/200,522
PRIOR APPLICATION NUMBER: 00/200,522
PRIOR PLING DATE: 2002-07-22
PRIOR APPLICATION NUMBER: 09/337,280
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ö
         ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Gaps
       Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      .;
0
         ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                APPLICANT: FORCH.
APPLICANT: Snell, R.
APPLICANT: Snell, R.
TITLE OF INVENTION: MARKER ASSISTED SELECTION OF BOVINE FOR TITLE OF INVENTION: MARKED MILK COMPOSITION
FILE REFERENCE: AJPARK19.001APC
CURRENT APPLICATION NUMBER: US/10/473,683
CURRENT FILING DATE: 2003-09-12
PRIOR APPLICATION NUMBER: PCT/NZ02/00157
PRIOR APPLICATION NUMBER: NZ 520797
PRIOR APPLICATION NUMBER: NZ 520797
PRIOR PILING DATE: 2002-08-15
PRIOR FILING DATE: 2002-08-15
PRIOR FILING DATE: 2002-06-05
NUMBER OF SEQ ID NOS: 62
SOFTWARE: FASESEQ for Windows Version 4.0
SSEQ ID NOS 41
LENGTH: 22
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      0.3%; Score 16.8; DB 1; Length 22; 90.0%; Pred. No. 4.9e+02; ive 0; Mismatches 2; Indels
         2; Indels
            0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      3270 TTTGTCAACTTCTTCACAGG 3289
                                                                                                                                                                                             US-10-473-683-41/c
; Sequence 41, Application US/10473683
; Publication No. US20040254104A1
; GENERAL INFORMATION:
                                                                                                1 gdarcccrcdadcrdcadda 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TTTGTCAACTTCTCCACAAG 3
                                                                                                                                                                                                                                                                                    APPLICANT: Blott, S.
APPLICANT: Kim, J.
APPLICANT: Schmidt-Kuntzel, A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Query Match
Best Local Similarity 90.0
Matches 18; Conservative
              18; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                       Cambisano, N.
                                                                                                                                                                                                                                                                                                                                                                                                                                 Grisart, B.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Georges, M.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Johnson, D.
Spelman, R.
                                                                                                                                                                                                                                                                                                                                                            Cornet, A.
Berzi, P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Moisio, S.
Vilkki, J.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Farnir, F.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ; TYPE: DNA; ORGANISM: Bos taurus US-10-473-683-41
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            US-10-999-188-52
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 22
              Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 셤
                                                                                                g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ઠે
```

```
RESULT 564
US-10-800-487-328
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ò
                                                                                                                                                                                                                                                                                                                                                                                                                  ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ö
                                                                                                                                                                                                                                                                                                                                                                                                              Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Gaps
                                                                                                                                                                                                                                                                                                                                                                                                              ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ö
                                                                                                                                                                                                     ; OTHER INFORMATION: Description of Artificial Sequence: Primer US-10-872-984-5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ; OTHER INFORMATION: Description of Artificial Sequence: Primer
US-10-872-984-6
                                                                                                                                                                                                                                                                                                                            Length 18;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Length 18;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                              1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              APPLICANT: ROLL, Matthew E.
APPLICANT: Roth, Matthew E.
APPLICANT: Lizardi, Paul M.
APPLICANT: Lizardi, Paul M.
APPLICANT: Latimer, Darin R.
ITILE OF INVENTION: Binary Encoded Sequence Tags
FILE REFERENCE: AGL 100
CURRENT APPLICATION NUMBER: US/10/872,984
CURRENT APPLICATION NUMBER: US/09/994,311
PRIOR APPLICATION NUMBER: US/09/637,751
PRIOR FILING DATE: 2000-08-11
NUMBER OF SEQ ID NOS: 10
SOFTWARE: PatentIn Ver. 2.1
SEQ ID NO ENCONENTIAL SECONENTIAL SECONEN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           APPLICANT: Kaufman, Joseph C.
APPLICANT: Rach, Matthew E.
APPLICANT: Lizardi, Paul M.
APPLICANT: Lizardi, Paul M.
APPLICANT: Feng, Li
APPLICANT: Feng, Li
APPLICANT: Latimer, Darin R.
TITLE OF INVENTION: Binary Encoded Sequence Tags
FILE REFERENCE: AGL 100
CURRENT APPLICATION NUMBER: US/10/872,984
CURRENT FILING DATE: 2004-06-21
PRIOR FILING DATE: 2001-11-26
PRIOR FILING DATE: 2001-11-26
PRIOR APPLICATION NUMBER: US/09/637,751
NUMBER OF SEQ ID NOS: 10
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Query Match
0.3%; Score 16.4; DB 1;
Best Local Similarity 94.4%; Pred. No. 4.4e+02;
Matches 17; Conservative 0; Mismatches 1;
                                                                                                                                                                                                                                                                                                                        Score 16.4; DB 1;
Pred. No. 4.4e+02;
0; Mismatches 1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        5023 GTAAAAAAAAAAAA 5040
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ; Sequence 6, Application US/10872984; Publication No. US20040265888A1; GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Sequence 7, Application US/10872984 Publication No. US20040265888A1 GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     5025 AAAAAAAAAAAAAA 5042
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  GCAAAAAAAAAAAAA 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               18 ACAAAAAAAAAAAA 1
                                                                                      TYPE: DNA ORGANISM: Artificial Sequence
                                                                                                                                                                                                                                                                                                                        Query Match
Best Local Similarity 94.4%;
Matches 17; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TYPE: DNA
ORGANISM: Artificial Seguence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          APPLICANT: Kaufman, Joseph C.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  RESULT 562
US-10-872-984-7/c
SEQ ID NO 5
                                                                                                                                                                        FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           g
```

```
; OTHER INFORMATION: Description of Artificial Sequence: Target Sequence/sinA sense re
US-10-800-487-162
                                                                                                                                                                                                                                                                                                                                                                                        GENERAL INFORMATION:
APPLICANT: Sirna Therapeutics, Inc.
APPLICANT: Sirna Therapeutics, Inc.
APPLICANT: McSwiggen, James
TILLE OF INVENTION: RNA Interference Mediated Inhibition Of Intercellular Adhesion
TILLE OF INVENTION: Molecule (ICAM) Gene Expression Using Short Interfering Nucleic
TILLE OF INVENTION: Acid (shNA)
FILE REPERENCE: 400/148 (MBH084-218)
CURRENT APPLICATION NUMBER: US/10/800,487
CURRENT FILING DATE: 2004-03-15
                                                                                                                                                                                                 ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Gaps
                                                                                                                                                                                                 ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ö
                                                                                     ; OTHER INFORMATION: Description of Artificial Sequence: Primer US-10-872-984-7
                                                                                                                                                           Length 18;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Query Match 0.3%; Score 16.4; DB 1; Length 19; Best Local Similarity 94.4%; Pred. No. 4.6e+02; Matches 17; Conservative 0; Mismatches 1; Indels
                                                                                                                                                                                                 Indela
                                                                                                                                                          Query Match

0.3%; Score 16.4; DB 1;
Best Local Similarity 94.4%; Pred. No. 4.4e+02;
Matches 17; Conservative 0; Mismatches 1;
                                                                                                                                                                                                                                                                                                                                                           Sequence 162, Application US/10800487
Publication No. US20050048529A1
                                                                                                                                                                                                                                  5022 TGTAAAAAAAAAAA 5039
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           5048 AAAAAAAAAAAAAAA 5065
                                                                                                                                                                                                                                                                     18 TGAAAAAAAAAAAA 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              18 ААААААААААААААТС 1
                                                                    ORGANISM: Artificial Sequence FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TYPE: RNA
ORGANISM: Artificial Sequence
SOFTWARE: Patentin Ver. 2.1 SEQ ID NO 7 LENGTH: 18 TYPE: DNA
                                                                                                                                                                                                                                                                                                                                        US-10-800-487-162/c
```

```
FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence: Target Sequence/sinA sense re
US-10-871-222-404
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   APPLICANT: Hacberli, Peter
APPLICANT: McSwiggen, James
TITLE OF INVENTION: Synthase Ligand (FASL) Gene Expression Using Short Interfering
TITLE OF INVENTION: Nucleic Acid (SITA)
FILE REFERENCE: 400/164 (MHB04-487)
CURRENT FILING DATE: 2004-66-18
PRIOR APPLICATION NUMBER: USIO/871,222
CURRENT FILING DATE: 2004-06-24
PRIOR APPLICATION NUMBER: USIO/82666
PRIOR PELING DATE: 2004-01-14
PRIOR PLING DATE: 2004-01-14
PRIOR PLING DATE: 2004-01-14
PRIOR PLING DATE: 2003-11-24
PRIOR PLING DATE: 2003-11-24
PRIOR PLING DATE: 2003-10-23
PRIOR PLING DATE: 2003-10-23
PRIOR PLING DATE: 2003-10-23
PRIOR PLING DATE: 2003-02-20
PRIOR PRIOR PLING DATE: 2003-03-31
PRIOR PLING DATE: 2003-03-31
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ô
               PRIOR APPLICATION NUMBER: US10/693059
PRIOR FILING DATE: 2003-10-23
PRIOR FILING DATE: 2003-10-23
PRIOR PLING DATE: 2003-05-23
PRIOR PLING DATE: 2003-05-23
PRIOR PLING DATE: 2003-02-20
PRIOR FILING DATE: 2003-02-20
PRIOR FILING DATE: 2003-02-20
PRIOR FILING DATE: 2003-02-20
PRIOR FILING DATE: 2002-02-20
PRIOR PLING DATE: 2002-02-20
PRIOR PLING DATE: 2002-02-20
PRIOR FILING DATE: 2002-02-20
PRIOR FILING DATE: 2002-02-20
PRIOR FILING DATE: 2002-02-20
PRIOR FILING DATE: 2002-03-11
PRIOR FILING DATE: 2002-02-20
PRIOR FILING DATE: 2003-02-20
PRI
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Remaining Prior Application data removed - See File Wrapper or PALM. NUMBER OF SEQ ID NOS: 706
SOFTWARE: Patentin version 3.3
SEQ ID NO 508
LEMOTH: 19
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  .;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Query Match 0.3%; Score 16.4; DB 1; Length 19; Best Local Similarity 88.9%; Pred. No. 4.6e+02; Matches 16; Conservative 1; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Sequence 508, Application US/10871222 Publication No. US20050119212A1 GENERAL INFORMATION: APPLICANT: Sirna Therapeutics, Inc.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         5024 TAAAAAAAAAAAAAA 5041
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            13
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TYPE: RNA
ORGANISM: Artificial Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TYPE: RNA
ORGANISM: Artificial Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            2 UACAAAAAAAAAAAAAAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                JS-10-871-222-508/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Š
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            US-10-8/1-222-404
; Sequence 404, Application US/10871222
; Sequence 404, Application US/10871222
; Sequence 404, Application No. US20050119212A1
; GENERAL INFORMATION:
; APPLICANT: Sirna Therapeutics, Inc.
; APPLICANT: Heaberli, Peter
; APPLICANT: McSwiggen, James
; TITLE OF INVENTION: RNA Mediated Inhibition Fatty Acid Synthase (FAS) and Fatty Acids
; TITLE OF INVENTION: Synthase Ligand (FASL) Gene Expression Using Short Interfering
; TITLE OF INVENTION: Nucleic Acid (SINA)
; TITLE OF INVENTION NUMBER: US/10/871,222
; CURRENT APPLICATION NUMBER: US/10/871,222
; CURRENT PILING DATE: 2004-06-18
; PRIOR APPLICATION NUMBER: US/0/826966
; PRIOR APPLICATION NUMBER: US/0/826966
; PRIOR APPLICATION NUMBER: US/0/757803
; PRIOR FILING DATE: 2004-01-14
; PRIOR FILING DATE: 2004-01-14
; PRIOR FILING DATE: 2003-11-24
Sequence 328, Application US/10800487
Publication No. UB2005004852941
GREERL INFORMATION:
APPLICANT: Stan Therapeutics, Inc.
APPLICANT: Stan Therapeutics, Inc.
APPLICANT: Stan Therapeutics, Inc.
APPLICANT: Stan Therapeutics, Inc.
APPLICANT: Mossingen, James
TITLE OF INVENTION: Robicole (ICAM) Gene Expression Using Short Interfering Nucleic
TITLE OF INVENTION: Acid (SHAN)
FILE REPRENEUT: 400/148 (NHHH04-218)
CURRENT APPLICATION NUMBER: US/10/800,487
CURRENT FILING DATE: 2004-01-15
FRIOR FILING DATE: 2004-01-15
FRIOR FILING DATE: 2003-11-23
FRIOR FILING DATE: 2003-10-23
FRIOR FILING DATE: 2003-10-23
FRIOR FILING DATE: 2003-04-30
FRIOR FILING DATE: 2003-02-20
FRIOR FILING DATE: 2003-02-20
FRIOR FILING DATE: 2002-03-30
F
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ; OTHER INFORMATION: Description of Artificial Sequence: sinA antisense region US-10-800-487-328
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Query Match
0.3%; Score 16.4; DB 1; Length 19;
Best Local Similarity 94.4%; Pred. No. 4.6e+02;
Matches 17; Conservative 0; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           5048 AAAAAAAAAAAAAAAA 5065
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AAAAAAAAAAAAAAUC 19
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ORGANISM: Artificial Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      US-10-871-222-404
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  q
```

```
Gapa
                                                                                    .
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ö
                                                                                                                                                                                                          RESULT 569
US-09-802-320A-22/C

Sequence 22, Application US/09802320A

Parent No. US20020155446A1

GENERAL INFORMATION:
APPLICANT: Bagert, James
APPLICANT: Brewer, Carl
APPLICANT: Brewer, Carl
APPLICANT: Gaudet, Daniel
APPLICANT: Worspur, Wery Low Density Lipoprotein Receptor
ITLE OF INVENTION: Polymorphisms and Uses Therefor
ITLE OF INVENTION: Polymorphisms and Uses Therefor
CURRENT FILING DATE: 2001-03-08

PRIOR APPLICATION NUMBER: 60/187, 787

PRIOR PLICATION DATE: 2000-03-08

PRIOR PLICATION DATE: 2000-03-08
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Query Match

0.3%; Score 16.4; DB 1; Length 21;
Best Local Similarity 85.0%; Pred. No. 5e+02;
Matches 17; Conservative 1; Mismatches 2; Indels
                                          Length 20;
                                                                                  1; Indels
                                          Score 16.4; DB 1;
Pred. No. 4.8e+02;
0; Mismatches 1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                NUMBER OF SEQ ID NOS: 22
SOFTWARE: PastSEQ for Windows Version 4.0
SEQ ID NO 22
LENGTH: 21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   US-10-004-378A-153
; Sequence 153, Application US/10004378A
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     3576 TGAACACTCACTTTTTGCAA 3595
                                                                                                                      4106 GICAICCIICCAGGCIC 4123
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Agee, Michele
Rastelli, Luca
Shenoy, Suresh G
Grosse, William M
Alsobrook II, John P
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           20 TGAACACTCRGTCTTTGCAA 1
                                                                                                                                              1 GTCATCCTGCCAGGGCTC 18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Burgess, Catherine E
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Patturajan, Meera
Shimkets, Richard A
Guo, Xiaojia Sasha
Casman, Stacie J
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Vernet, Corrine A
Spytek, Kimberly A
                                          Query Match
Best Local Similarity 94.4%;
Matches 17; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Publication No. US20030228301A1
GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      MacDougall, John R
Peyman, John A
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Malyankar, Uriel M
Tchernev, Velizar
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             APPLICANT: Li, Li
APPLICANT: Furtak, Kazarzyna
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Lepley, Denise M
Gerlach, Valerie
Edinger, Schlomit
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Perna, Amanda
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ORGANISM: Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     US-09-802-320A-22
      US-10-476-021-57
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TYPE: DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          APPLICANT:
                                                                                                                      ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ઠે
                                                                                                                                                                                                                                                                                Sequence 57, Application US/10476021
Sequence 57, Application US/10476021
Publication No. US20040186069A1
GENERAL INFORMATION:
APPLICANT: Andrew T. Watt
TITLE OF INVENTION: ANTIEBNSE MODULATION OF TUMOR NECROSIS FACTOR RECEPTOR 2 EXPRESSIFIE REFERENCE: RTS-0216
CURRENT APPLICATION NUMBER: US/10/476,021
CURRENT APPLICATION NUMBER: US/9/844,634
PRIOR PILING DATE: 2001-04-27
NUMBER OF SEQ ID NOS: 174
SEQ ID NO 57
LENGTH: 20
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence: sinA antisense region
US-10-871-222-508
                                                                                                                      ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ö
                                                                                                                    Gaps
                                                                                                                      ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ö
                                                                            Query Match 0.3%; Score 16.4; DB 1; Length 19; Best Local Similarity 94.4%; Pred. No. 4.6e+02; Matches 17; Conservative 0; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Query Match 0.3%; Score 16.4; DB 1; Length 20; Best Local Similarity 94.4%; Pred. No. 4.8e+02; Matches 17; Conservative 0; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        FEATURE: OTHER INFORMATION: Antisense Oligonucleotide
                                                                                                                                                        5024 TAAAAAAAAAAAAA 5041
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       3412 CAGCAAAAGCGGGAGCAG 3429
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           3 caccanadecaceacae 20
                                                                                                                                                                                          18 TACAAAAAAAAAAA 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ORGANISM: Artificial Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TYPE: DNA ORGANISM: Artificial Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ; OTHER INFORMATION: Primer US-10-454-224-29
                                                                                                                                                                                                                                                  RESULT 567
US-10-454-224-29
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   RESULT 568
US-10-476-021-57
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             LYPE: DNA
                                                                                                                                                        ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ð
```

```
Sequence 12305, Application US/10786720
| Sequence 12305, Application US/10786720
| Publication No. US20040191818A1
| Publication No. US20040191818A1
| Publication No. US20040191818A1
| APPLICANT: Wyeth
| APPLICANT: U.W. Wei
| APPLICANT: Liu, Wei
| TITLE OF INVENTION: COMPOSITIONS AND METHODS FOR DIAGNOSING AND TREATING AUTOIMMUNE TITLE OF INVENTION: DISEASES
| TITLE OF INVENTION: DISEASES
| TITLE OF INVENTION: DISEASES
| TITLE OF INVENTION: UNMERS: US404-02-26
| CURRENT FILING DATE: 2004-02-26
| NUMBER OF SEQ ID NOS: 21135
| SOFTWARE: PATENTIN VERSION 3.2
| SEQ ID NO 12305
| LENGTH: 21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            RESULT 573
US-10-751-736-53486

j Sequence 53486, Application US/10751736
j Publication No. US20040265230A1
j GENERAL INFORMATION:
APPLICANT: Wyeth
j APPLICANT: Wartinez, Robert
APPLICANT: Brown, Eugene
j TITLE OF INVENTION: COMPOSITIONS AND METHODS FOR DIAGNOSING AND TREATING COLON
TITLE OF INVENTION: CANCERS
TITLE OF INVENTION: CANCER
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Gaps
                                                                                                                                                                                                                                                                                                                                                                                                           OTHER INFORMATION: Description of Artifical Sequence: Primer/Probe US-10-428-275-390
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Query Match 0.3%; Score 16.4; DB 1; Length 21; Best Local Similarity 94.4%; Pred. No. 5e+02; Matches 17; Conservative 0; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Score 16.4; DB 1; Length Pred. No. 5e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     0; Mismatches
PRIOR FILING DATE: 2001-02-23
PRIOR APPLICATION NUMBER: 60/185548
PRIOR FILING DATE: 2000-02-25
NUMBER OF SEQ ID NOS: 450
SOFTWARE: CuraSeqList version 0.1
SEQ ID NO 390
LENGTH: 21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             2124 TACACATCCAAATGGAAA 2141
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1161 TCCTGAACGTTTTGTTGA 1178
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           19 racacarccaaargcaaa 2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               4 rccreaaggrrrrgrrga 21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Query Match 0.3%;
Best Local Similarity 94.4%;
Matches 17; Conservative
                                                                                                                                                                                                                                                                                                                             TYPE: DNA
ORGANISM: Artificial Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       GRGANISM: RNAi-sense strand US-10-786-720-12305
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              RESULT 572
US-10-786-720-12305/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       SEQ ID NO 53486
LENGTH: 21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 APPLICANT: Alvarez et al.

TITLE OF INVENTION: THERAPEUTIC POLYPEPTIDES, NUCLEIC ACIDS ENCODING SAME, AND METHOD TITLE OF INVENTION: THERAPEUTIC POLYPEPTIDES, NUCLEIC ACIDS ENCODING SAME, AND METHOD TITLE OF INVENTION: 1203-05-01

CURRENT APPLICATION NUMBER: 09/96645

PRIOR PILING DATE: 2001-09-26

PRIOR PLILING DATE: 2001-09-26

PRIOR PLILING DATE: 2000-04-06

PRIOR PLILING DATE: 1999-04-09

PRIOR PLILING DATE: 1999-04-09

PRIOR PLILING DATE: 1999-04-09

PRIOR PLILING DATE: 00/134315

PRIOR PLILING DATE: 1999-05-14

PRIOR PLILING DATE: 00/96965

PRIOR PLILING DATE: 00/96965

PRIOR PLILING DATE: 00/96965

PRIOR PLILING DATE: 00/96965

PRIOR PLILING DATE: 1999-05-14

PRIOR PLILING DATE: 1999-06-14
                                APPLICANT: Gunther, Erik
APPLICANT: Stone, David J
APPLICANT: Stone, David J
APPLICANT: Stone, David J
APPLICANT: Stone, David J
APPLICANT: Gangolli, Esha A
APLICANT: Gangolli, Esha A
APLICANTO: No. US20030228301A1el Human Proteins, Polymucleotides Encoding TH
ITILE OF INVENTION: Not USER: US200-10-24
CURRENT APPLICATION NUMBER: 60/242,882
PRIOR PRILING DATE: 2000-10-24
PRIOR PELING DATE: 2000-10-24
PRIOR APPLICANTON NUMBER: 60/242,765
PRIOR APPLICANTON NUMBER: 60/242,769
PRIOR APPLICANTON NUMBER: 60/242,769
PRIOR APPLICANTON NUMBER: 60/242,767
PRIOR APPLICANTON NUMBER: 60/242,767
PRIOR PLING DATE: 2000-10-24
PRIOR PLING DATE: 2000-10-24
PRIOR PLING DATE: 2000-10-24
PRIOR PLING DATE: 2000-10-24
PRIOR PLING DATE: 2000-10-26
PRIOR APPLICANTON NUMBER: 60/243,591
PRIOR PLING DATE: 2000-10-26
PRIOR APPLICANTON NUMBER: 60/243,590
PRIOR PLING DATE: 2000-10-27
PRIOR PLING DAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ) OTHER INFORMATION: Description of Artificial Sequence: PCR Primer; OTHER INFORMATION: sequence
US-10-004-378A-153
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Query Match 0.3%; Score 16.4; DB 1; Length 21; Best Local Similarity 94.4%; Pred. No. 5e+02; Matches 17; Conservative 0; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Sequence 390, Application US/10428275 Publication No. US20040067505A1 GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1161 TCCTGAACGTTTTGTTGA 1178
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TYPE: DNA
ORGANISM: Artificial Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               4 rccreaagerrrrgrrga
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    셤
```

```
Sequence 3343, Application US/10786720 Publication No. US20040191818A1 GENERAL INFORMATION: APPLICANT: Wyeth
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           2648 AACTGATGCCTTATCTTGACC 2668
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      3126 AAATGTAAATGAAGAATGGAA 3146
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1 AAATGAAGATGAGGAATGGAA 21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          21 AACTGATGCCCTATTTTGCCC 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TYPE: DNA
ORGANISM: Artificial Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 4 OTHER INFORMATION: PCR Primer US-10-431-599-26
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Best Local Similarity 85.79
Matches 18; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ; ORGANISM: Homo sapiens
US-10-786-720-3343
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    US-10-786-720-3345/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          RESULT 577
US-10-786-720-3343
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TYPE: DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     RESULT 578
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ò
                                                                                                                                                                                                                                                                                                                                                                                                                                            Sequence 3425, Application US/10847918
| Publication No. US20050119210A1 |
| GENERAL INFORMATION: |
| APPLICANT: Wyeth |
| APPLICANT: Howes Steve |
| APPLICANT: Liu, Wei |
| APPLICANT: Howes Steve |
| TITLE OF INVENTION Compositions and Methods for Diagnosing and Treating Cancers |
| TITLE OF INVENTION NUMBER: US/10/847,918 |
| CURRENT PELING DATE: 2004-05-19 |
| PRIOR PELICATION NUMBER: US 60/471,729 |
| PRIOR APPLICATION NUMBER: US 60/471,729 |
| WANTON COUNTY OF THE TOWN NUMBER: US/10/847,918 |
| PRIOR APPLICATION NUMBER: US/10/847,918 |
| PRIOR PILING DATE: 2003-05-20 |
| PUBLICATION NUMBER: US/10/871,729 |
| PUBLICATION NUMBER: US/10/871,729 |
| PUBLICATION NUMBER: US/10/871,729 |
| PUBLICANT: US/10/871,729 |
| PUBLICANT: WANTON NUMBER: US/10/871,729 |
| PUBLICANT: US/10/871,729 |
| PUBLICANT: WANTON NUMBER: US/10/871,729 |
| P
                                                                                                                                                                     ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ; OTHER INFORMATION: G allele fragment of hypothetical sequence of Fig. 37 US-10-105-101A-23
                                                                                                                                                                     Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Gaps
                                                                                                                                                                     ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     US-10-105-101A-23/c
; Sequence 23, Application US/10105101A
; Sequence 23, Application US/10105101A
; Publication Wo. US20030134290A1
; GENERAL INFORMATION:
; APPLICANT: Variagenice, Inc
; TITLE OF INVENTION: A Method for Identifying Polymorphisms
; TITE REFERENCE: 272/ide
; CURRENT APPLICATION: A Method for Identifying Polymorphisms
; CURRENT APPLICATION NUMBER: US/10/105,101A
; UNMBER OF SEQ ID NOS: 25
; SOFTWARE: PatentIn version 3.1
; SEQ ID NO 23
; LENGTH: 21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Score 16.4; DB 1; Length 21;
Pred. No. 5e+02;
5; Mismatches 1; Indels
                                                                                                Score 16.4; DB 1; Length 21;
Pred. No. 5e+02;
4; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   0.3%; Score 16.2; DB 1; Length 21; larity 85.7%; Pred. No. 5.2e+02; Conservative 0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      3757 GGTGCTGTCCAGCTTCTTGGA 3777
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        21 GGTGCTGTCCAGTTTCTCCGA 1
                                                                                                                                                                                                                                   4044 TACAAGCAGTGGTACCAT 4061
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           955 TTCCAGATCCTGACAGCT 972
                                                                                                                                                                                                                                                                         4 UUCCAGAUCCUGACAGUU 21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               0.3%;
                                                                                                0.3%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     NUMBER OF SEQ ID NOS: 14937
SOFTWARE: Patentin version 3.2
SEQ ID NO 3425
LENGTH: 21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TYPE: RNA
ORGANISM: RNAi-sense strand
US-10-847-918-3425
                                                                                                                               Best Local Similarity 72.2
Matches 13; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Best Local Similarity 66.7
Matches 12, Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TYPE: DNA ORGANISM: Artificial
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Local Similarity
hes 18; Conserv
; ORGANISM: RNA1
US-10-751-736-53486
                                                                                                                                                                                                                                                                                                                                                                                                                                     US-10-847-918-3425
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Query Match
Best Local S
Matches 18
                                                                                                    Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          g
                                                                                                                                                                                                                                   ઠ
                                                                                                                                                                                                                                                                                       g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             δ
```

```
Sequence 26, Application US/10431599

Sequence 26, Application US/10431599

Sequence 26, Application US/10431599

Sequence 26, Application US_0040029271A1

GENERAL INFORMATION:

APPLICANT: Busslinger, Meinrad

APPLICANT: Heavey, Barry

ITLE OF INVENTION: calls in human therapy

ITLE OF INVENTION: calls in human therapy

FILE REFERENCE: 0652.2500001

CURRENT APPLICATION NUMBER: US 60/385,582

PRIOR APPLICATION NUMBER: US 60/385,582

PRIOR APPLICATION NUMBER: EP 02 010 439.4

PRIOR APPLICATION NUMBER: EP 02 010 439.4

PRIOR APPLICATION NUMBER: BP 02 010 439.4

PRIOR APPLICATION NUMBER: S002-06-08

NUMBER OF SEQ ID NOS: 30

SOFTWARE: PatentIn version 3.1

LENGTH: 21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   APPLICANT: 0.Toole, Margot
APPLICANT: 0.Toole, Margot
APPLICANT: 0.Toole, Wei
TITLE OF INVENTION: COMPOSITIONS AND METHODS FOR DIAGNOSING AND TREATING AUTOIMMUNE
TITLE OF INVENTION: DISEASES
TITLE OF INVENTION: DISEASES
TITLE OF MARCHING DATE: 2004-02-26
CURRENT APPLICATION NUMBER: US/10/786,720
CURRENT FILING DATE: 2004-02-26
NUMBER OF SEQ ID NOS: 21135
SOFTWARE: Patentin version 3.2
SEQ ID NO 3343
LENGTH: 21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Сарв
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Gapa
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ô
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    0.3%; Score 16.2; DB 1; Length 21;
85.7%; Pred. No. 5.2e+02;
tive 0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Length 21;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Query Match

0.3%; Score 16.2; DB 1;
Best Local Similarity 85.7%; Pred. No. 5.2e+02;
Matches 18; Conservative 0; Mismatches 3;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ; Sequence 3345, Application US/10786720; Publication No. US20040191818A1
; GENERAL INCERVATION:
; APPLICANT: Wyeth
```

```
Sequence 4073, Application US/10786720
Publication No. US20040191818A1
GENERAL INFORMATION:
GENERAL INFORMATION:
APPLICANT: Westh
APPLICANT: Liu, West
APPLICANT: US INSTANTION: USPASS
FILE REFERENCE: 031896-023000 (AM101331L)
CURRENT APPLICATION UNDERS: US/10/786,720
CURRENT FILING DATE: 2004-02-26
NUMBER OF SEQ ID NOS: 21135
SOFTWARE: Patentin version 3.2
LENGTH: 21
                                                                                                                                                                                                                                                                   Sequence 4047, Application US/10786720

Sequence 4047, Application US/10786720

Publication No. US20040191818A1

APPLICANT: Wyeth

APPLICANT: Wyeth

APPLICANT: Liu, Wei

TITLE OF INVENTION: DISEASES

FILE REFERENCE: 031966-0233000 (AM101331L)

CURRENT APLICATION NUMBER: US/10/786,720

CURRENT PILING DATE: 2004-02-26

NUMBER OF SEQ ID NOS: 21135

SOFTWARE: Patentin version 3.2

SEQ ID NO 4047

LENGTH: 21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ö
                                                                           ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Gaps
                                                                                Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ;
0
                                                                              ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Length 21;
                               Score 16.2; DB 1; Length 21;
Pred. No. 5.2e+02;
0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Length 21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Score 16.2; DB 1;
Pred. No. 5.2e+02;
0; Mismatches 3;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Query Match 0.3%; Score 16.2; DB 1; Best Local Similarity 85.7%; Pred. No. 5.2e+02; Matches 18; Conservative 0; Mismatches 3;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                3395 AACTICAGCAACTCATCCAGC 3415
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 3126 AAATGTAAATGAAGAATGGAA 3146
                                                                                                                               3126 AAATGTAAATGAAGAATGGAA 3146
                                                                                                                                                                             1 AAATGAAGATGAGGAATGGAA 21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             21 AAATGAAGATGAGGAATGGAA 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               21 AACTICAGCCGCTCCTCCAGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TYPE: RNA CAGANISM: ANAi-antisense strand US-10-786-720-4047
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             0.3%;
                                         Query Match 0.3%;
Best Local Similarity 85.7%;
Matches 18; Conservative (
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TYPE: RNA
CRGANISM: RNAi-sense strand
US-10-786-720-4073
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Query Match
Best Local Similarity 85.7
Matches 18; Conservative
                                                                                                                                                                                                                                                         RESULT 581
US-10-786-720-4047/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           RESULT 583
US-10-786-720-4783
US-10-786-720-4045
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           8
                                                                                                                                         ઠે
                                                                                                                                                                                     q
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          VS-10-786-720-4045
US-10-786-720-4045
Sequence 4045, Application US/10786720
Sequence 4045, Application US/10786720
Sequence 4045, Application US/10786720
Sequence 4045, Application US/10786720
Sequence 4045, Application US/1078610
GENERAL INFORMATION: O'TOOLE, Margot
APPLICANT: Weil
TITLE OF INVENTION: DISEASES
FILE OF INVENTION: DISEASES
FILE REFERENCE: 031896-023000 (AM101331L)
CURRENT APPLICATION NUMBER: US/10/786,720
CURRENT PILLING DATE: 2004-02-26
NUMBER OF SEQ ID NOS: 21135
SOFTWARE: Patentin Version 3.2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   GENERAL ANNOLUS.

APPLICANT: Wyeth
APPLICANT: U'Toole, Margot
APPLICANT: Liu, Weith
TITLE OF INVENTION: DISEASES
TITLE OF INVENTION: DISEASES
TITLE OF INVENTION: DISEASES
CURRENT APPLICATION NUMBER: US/10/786,720
CURRENT APPLICATION NUMBER: US/10/786,720
CURRENT FILING DATE: 2004-02-26
NUMBER OF SEQ ID NOS: 21135
SOFTWARE: PatentIn version 3.2
SEQ ID NO 3371
LENGTH: 21
         APPLICANT: O'TOOLE, MAIGOC
APPLICANT: Liu, Wei
TITLE OF INVENTION: COMPOSITIONS AND METHODS FOR DIAGNOSING AND TREATING AUTOIMMUNE
TITLE OF INVENTION: DISEASES
FILE REFERENCE: 031896-023000 (AM101331L)
CURRENT APPLICATION NUMBER: US/10/786,720
CURRENT PILING DATE: 2004-02-26
NUMBER OF SEQ ID NOS: 21135
SOFTWARE: Patentin version 3.2
SOFTWARE: Patentin version 3.2
LENGTH: 21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ö
                                                                                                                                                                                                                                                                                                                                                                                                     ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Gaps
                                                                                                                                                                                                                                                                                                                                                                                                        Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ö
                                                                                                                                                                                                                                                                                                                                                                                                        ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Query Match 0.3%; Score 16.2; DB 1; Length 21; Best Local Similarity 85.7%; Pred. No. 5.2e+02; Matches 18; Conservative 0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                        3; Indels
                                                                                                                                                                                                                                                                                                                                                         0.3%; Score 16.2; DB 1;
ilarity 85.7%; Pred. No. 5.2e+02;
Conservative 0; Mismatches 3;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          3395 AACTICAGCAACTCATCCAGC 3415
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ; Sequence 3371, Application US/10786720; Publication No. US20040191818A1; GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                         3126 AAATGTAAATGAAGAATGGAA 3146
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  21 AACTTCAGCCGCTCCTCCAGC 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                21 AAATGAAGATGAGGAATGGAA 1
                                                                                                                                                                                                                                                                      ; TYPE: RNA
; ORGANISM: RNAi-antisense strand
US-10-786-720-3345
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TYPE: RNA
CRGANISM: RNAi-sense strand
US-10-786-720-3371
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TYPE: DNA
ORGANISM: Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                      Best Local Similarity
Matches 18; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    US-10-786-720-3371/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             SEQ ID NO 4045
LENGTH: 21
                                                                                                                                                                                                                                                                                                                                                                Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ઠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          g
```

```
Second No. 1221, Application US/10786720
Fublication No. US20040191818A1
GENERAL INFORMATION:
GENERAL INFORMATION:
APPLICANT: Wyeth
TITLE OF INVENTION: COMPOSITIONS AND METHODS FOR DIAGNOSING AND TREATING AUTOIMMUNE
TITLE OF INVENTION: COMPOSITIONS AND METHODS FOR DIAGNOSING AND TREATING AUTOIMMUNE
TITLE OF INVENTION: US/10/786,720
CURRENT APPLICATION NUMBER: US/10/786,720
CURRENT FILING DATE: 2004-02-26
NUMBER OF SEQ ID NOS: 21135
SOFTWARE PATENTIAL VERSION 3.2
LENGTH: 21
LENGTH: 21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     APPLICANT: Wyeth APPLICANT: Wyeth APPLICANT: Wyeth APPLICANT: Wyeth APPLICANT: O'Toole, Margot APPLICANT: O'Toole, Margot APPLICANT: D'Toole, Margot APPLICANT: DIS,W WEIL COMPOSITION: DISEASES TITLE OF INVENTION: DISEASES FILE REFERENCE: 031896-023000 (AM101331L) CURRENT APPLICATION UNDHER: US/10/786,720 CURRENT FILING DATE: 2004-02-26 NUMBER OF SEQ ID NOS: 21135 SOFTWARE: Patentin version 3.2 SEQ ID NO 13756 LENGTH: 21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ö
                                                                                                                                                                                                         ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Gapa
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ö
                                                                                                                                                                                                         ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Length 21;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               0.3%; Score 16.2; DB 1; Length 21; 85.7%; Pred. No. 5.2e+02; tive 0; Mismatches 3; Indel8
                                                                                                                                                        Length 21;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Indela
                                                                                                                                                   Query Match

0.3%; Score 16.2; DB 1;
Best Local Similarity 85.7%; Pred. No. 5.2e+02;
Matches 18; Conservative 0; Mismatches 3;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Query Match

0.3%; Score 16.2; DB 1;
Best Local Similarity 85.7%; Pred. No. 5.2e+02;
Matches 18; Conservative 0; Mismatches 3;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      US-10-786-720-13756/c
; Sequence 13756, Application US/10786720
; Publication No. US20040191818A1
; GENERAL INFORMATION:
                                                                                                                                                                                                                                                     3395 AACTICAGCAACTCATCCAGC 3415
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          3754 AATGGTGCTGTCCAGCTTCTT 3774
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    3987 GTCGGCCTCATCACTTCCTT 4007
                                                                                                                                                                                                                                                                                                 21 AACTICAGCGCTCCTCCAGC 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        21 AArGGrecricrecarcrecar 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     21 GrcAGGCCTGTTCACTTCCTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ; ORGANISM: RNAi-antigenge strand
US-10-786-720-13221
                                           TYPE: RNA

// ORGANISM: RNAi-sense strand

US-10-786-720-4811
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Matches 18; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ; TYPE: DNA
; ORGANISM: Homo sapiens
US-10-786-720-13756
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                    US-10-786-720-13221/c
  ; SEQ ID NO 4811
; LENGTH: 21
                                                                                                                                                                                                                                                        ð
                                                                                                                                                                                                                                                                                                 요
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ઢ
                                                                                     APPLICANT: 0'TOOLE, Margot
APPLICANT: 0'TOOLE, Margot
APPLICANT: Liu, Wei
TITLE OF INVENTION: COMPOSITIONS AND METHODS FOR DIAGNOSING AND TREATING AUTOIMMUNE
TITLE OF INVENTION: DISEASES
FILE REPERENCE: 031896-023000 (AM101331L)
CURRENT APPLICATION NUMBER: US/10/786,720
CURRENT PILING DATE: 2004-02-26
NUMBER OF SEQ ID NOS: 21135
SOFTWARE: Patentin version 3.2
SEQ ID NO 4783
LENGTH: 21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               US-10-786-720-4811/c

Sequence 4811, Application US/10786720

Sequence 4811, Application US/10786720

Publication No. US20040191818A1

GENERAL INFORMATION:
APPLICANT: Wyeth
APPLICANT: Liu, Weit
TITLE OF INVENTION: COMPOSITIONS AND METHODS FOR DIAGNOSING AND TREATING AUTOIMMUNE
TITLE OF INVENTION: DISEASES
TITLE OF INVENTION: DISEASES
TITLE OF INVENTION: UNMBER: US/10/786,720
CURRENT APPLICATION NUMBER: US/10/786,720
CURRENT PILLNG DATE: 2004-02-26
NUMBER OF SEQ ID NOS: 21135
SOFTWARE: PATENTIN VEHSION 3.2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 APPLICANT: O'TOOLE, Margot
APPLICANT: O'TOOLE, Wasgot
APPLICANT: Liu, Wei
TITLE OF INVENTION: COMPOSITIONS AND METHODS FOR DIAGNOSING AND TREATING AUTOIMMUNE
TITLE OF INVENTION: DISEASES
FILE REFERENCE: 031896-023000 (AM101331L)
CURRENT APPLICATION NUMBER: US/10/786,720
CURRENT FILING DATE: 2004-02-26
NUMBER OF SEQ ID NOS: 21135
SOFTWARE: Patentin vergion 3.2
SEQ ID NO 4785
LENGTH: 21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            0.3%; Score 16.2; DB 1; Length 21;
85.7%; Pred. No. 5.2e+02;
tive 0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ch 0.3%; Score 16.2; DB 1; Length 21; I Similarity 85.7%; Pred. No. 5.2e+02; 18; Conservative 0; Mismatches 3; Indels
Sequence 4783, Application US/10786720 Publication No. US20040191818A1 GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Sequence 4785, Application US/10786720; Publication to US20040191818A1 GENERAL INFORMATION: APPLICANT: Wyeth
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              3126 AAATGTAAATGAAGAATGGAA 3146
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      3126 AAATGTAAATGAAGAATGGAA 3146
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1 AAATGAGATGAGAATGGAA 21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    21 AAATGAAGATGAGGAATGGAA 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ; ORGANISM: RNAi-antisense strand US-10-786-720-4785
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             18; Conservative
                                                                                                                                                                                                                                                                                                                                                                          TYPE: DNA
ORGANISM: Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Best Local Similarity
Matches 18; Conserva
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     RESULT 584
US-10-786-720-4785/c
                                                                        APPLICANT: Wyeth
                                                                                                                                                                                                                                                                                                                                                                                                                           US-10-786-720-4783
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Query Match
Best Local (
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TYPE: RNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          유
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    g
```

ò

```
APPLICANT: 0'Toole, Margot
APPLICANT: 10'Toole, Margot
APPLICANT: Liu, Wei
TITLE OF INVENTION: COMPOSITIONS AND METHODS FOR DIAGNOSING AND TREATING AUTOIMMUNE
TITLE OF INVENTION: DISEASES
TILE REFERENCE: 031896-023000 (AM101331L)
CURRENT APPLICAND NUMBER: US/10/786,720
CURRENT FILING DATE: 2004-02-26
NUMBER OF SEQ ID NOS: 21135
SOFTWARE: Parentin version 3.2
SEQ ID NO 18572
LENGTH: 21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sequence 17384, Application US/10786720

Publication No. US20040191818A1

GENERAL INFORMATION:
APPLICANT: Wyeth
APPLICANT: Liu, Wei
TITLE OF INVENTION: DISEASES
FILE OF INVENTION: DISEASES
FILE OF INVENTION: DISEASES
FILE REFERENCE: 031896-023000 (AM101331L)
CURRENT FILING DATE: 2004-02-26

NUMBER OF SEQ ID NOS: 21135
SOFTWARE: Patentin version 3.2

SEQ ID NO 17384
                                                                                                                                                                                                                                                                                                         ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ö
                                                                                                                                                                                                                                                                                                         Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ö
                                                                                                                                                                                                                                                                                                         ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ó
                                                                                                                                                                                                                                                  Query Match 0.3%; Score 16.2; DB 1; Length 21; Best Local Similarity 47.6%; Pred. No. 5.2e+02; Matches 10; Conservative 8; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Query Match 0.3%; Score 16.2; DB 1; Length 21; Best Local Similarity 42.9%; Pred. No. 5.2e+02; Matches 9; Conservative 9; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Query Match 0.3%; Score 16.2; DB 1; Length 21; Best Local Similarity 42.9%; Pred. No. 5.2e+02; Matches 9; Conservative 9; Mismatches 3; Indels
CURRENT APPLICATION NUMBER: US/10/786,720
CURRENT FILING DATE: 2004-02-26
NUMBER OF SEQ ID NOS: 21135
SSCTWARE: PatentIn version 3.2
SEQ ID NO 14484
LENGTH: 21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ; Sequence 18572, Application US/10786720; Publication No. US20040191818A1; GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                        3988 TCGGGCCTCATCACTTCCTTT 4008
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       3263 GIGICCCTITGICAACTICIT 3283
                                                                                                                                                                                                                                                                                                                                                                                     1 UCAGGCCUGUUCACUUCCUUU 21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1 GUAUGCCUUUGUCAACUACUU 21
                                                                                                                                                                             ; ORGANISM: RNAi-antisense strand
US-10-786-720-14484
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ; ORGANISM: RNA1-sense strand US-10-786-720-17384
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ; ORGANISM: RNAi-sense strand US-10-786-720-18572
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            US-10-786-720-17384
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          US-10-786-720-18572
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TYPE: RNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   RESULT 592
                                                                                                                                                                                                                                                                                                                                                              ð
                                                                                                                                                                                                                                                                                                                                                                                                     g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Sequence 13758, Application US/10786720

Sequence 13758, Application US/10786720

Publication No. US20040191818A1

GENERAL INFORMATION:

APPLICANT: Wyeth

APPLICANT: O'Toole, Margot

APPLICANT: Liu, Weit

TITLE OF INVENTION: COMPOSITIONS AND METHODS FOR DIAGNOSING AND TREATING AUTOIMMUNE

TITLE OF INVENTION: DISEASES

TITLE OF INVENTION: DISEASES

TITLE OF INVENTION: DISEASES

TITLE OF INVENTION: DISEASES

TITLE OF INVENTION: 01056-022000 (AM101331L)

CURRENT PELING DATE: 2004-02-26

NUMBER OF SEQ ID NOS: 21135

SOFTWARE: PATENTIN VERSION 3.2

SEQ ID NO 13758

LENGTH: 21
                                                                                    Sequence 13757, Application US/10786720
Sequence 13757, Application US/10786720
Publication No. US20040191818A1
GENERAL INFORMATION:
BAPLICANT: Wyeth
APPLICANT: Wyeth
APPLICANT: Diu, Wei
TITLE OF INVENTION: COMPOSITIONS AND METHODS FOR DIAGNOSING AND TREATING AUTOIMMUNE TITLE OF INVENTION: DISEASES
FILE REFERENCE: 031896-023000 (AM.01331L)
CURRENT APPLICATION NUMBER: US/10/786,720
CURRENT FILING DATE: 2004-02-26
NUMBER OF SEQ ID NOS: 21135
SOFTWARE: Patentin version 3.2
SEQ ID NO 13757
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Sequence 14484, Application US/10786720
Publication No. US20040191818A1
GENERAL INFORMATION:
APPLICANT: Wyeth
APPLICANT: Liu, Wei
TITLE OF INVENTION: DISEASES
FILE REFERENCE: 031896-023000 (AM101331L)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   0.3%; Score 16.2; DB 1; Length 21; larity 85.7%; Pred. No. 5.2e+02; Conservative 0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Query Match 0.3%; Score 16.2; DB 1; Length 21; Best Local Similarity 52.4%; Pred. No. 5.2e+02; Matches 11; Conservative 7; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       3985 AAGTCGGCCTCATCACTTCC 4005
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        3987 GTCGGCCTCATCACTTCCTT 4007
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |:| ||||: :|||::||::
| GUCAGGCCUGUUCACUUCCUU 21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      21 AAGTCAGGCCTGTTCACTTCC 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TYPE: RNA ORGANISM: RNAi-antisense strand
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ; TYPE: RNA
; ORGANISM: RNAi-sense strand
US-10-786-720-13757
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Best Local Similarity
Matches 18; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               US-10-786-720-13758
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 RESULT 590
US-10-786-720-14484
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Query Match
```

d

ð

```
RESULT 596
US-10-751-736-19985/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   US-10-751-736-48150/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ORGANISM: RNAi
US-10-751-736-19985
                                                                                                                                                                                                                                                                                                                                                                                                                      TYPE: RNA
ORGANISM: RNAi
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    US-10-751-736-5694
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             RESULT 597
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ઠે
                                                                                                                                                                                                                                                                     APPLICANT: Brown, Eugene
APPLICANT: Brown, Eugene
APPLICANT: Liu, Wei
TITLE OF INVERTION: COMPOSITIONS AND METHODS FOR DIAGNOSING AND TREATING COLON
TITLE OF INVENTION: CANCERS
FILE REFERENCE: AM100927 (031896-002000)
CURRENT APPLICATION NUMBER: US/10/751,736
CURRENT APPLICATION NUMBER: US/Poofisional Application 60/438,000
PRIOR PILING DATE: 2003-01-06
NUMBER OF SEQ ID NOS: 54873
SEQ ID NO 1936
LENGTH: 21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            APPLICANT: Martinez, Robert
APPLICANT: Martinez, Robert
APPLICANT: Brown, Eugene
APPLICANT: Brown, Eugene
APPLICANT: Liu, Wei
TITLE OF INVENTION: COMPOSITIONS AND METHODS FOR DIAGNOSING AND TREATING COLON
TITLE OF INVENTION: CANCERS
FILE REFERENCE: AM100927 (031896-002000)
CURRENT APPLICATION NUMBER: US/10/751,736
CURRENT PILING DATE: 2003-01-06
PRIOR FILING DATE: 2003-01-06
PRIOR FILING DATE: 2003-01-06
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Query Match 0.3%; Score 16.2; DB 1; Length 21; Best Local Similarity 85.7%; Pred. No. 5.2e+02; Matches 18; Conservative 0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          0.3%; Score 16.2; DB 1; Length 21; larity 76.2%; Pred. No. 5.2e+02; Conservative 2; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ; Sequence 2183, Application US/10751736; Publication No. US20040265230A1; GENERAL INFORMATION:
3263 GTGTCCCTTTGTCAACTTCTT 3283
                                                                                                                                                           Sequence 1936, Application US/10751736
Publication No. US20040265230A1
GRNERAL INFORMATION:
APPLICANT: Wyeth
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          4840 AAGAATCAGCCAGCCAACAAT 4860
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      4840 AAGAATCAGCCAGCCAACAAT 4860
                     1 GUAUGCCUUUGUCAACUACUU 21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1 AAGAATCAGCTAGCAAACAGT 21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1 AAGAAUCAGCUAGCAAACAUU 21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    NUMBER OF SEQ ID NOS: 54873
SOFTWARE: PatentIn version 3.2
SEQ ID NO 2183
LENGTH: 21
                                                                                                                                                                                                                                                  APPLICANT: Martinez, Robert
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ; TYPE: DNA
; ORGANISM: homo sapiens
US-10-751-736-1936
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Query Match
Best Local Similarity
Matches 16; Conserv
                                                                                                             RESULT 593
US-10-751-736-1936
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               US-10-751-736-2183
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ; ORGANISM: RNAi
US-10-751-736-2183
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TYPE: RNA
                                    g
ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                셤
```

RESULT 595

```
ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ઠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Sequence 94, Application US/10755118

Sequence 94, Application No. US20050009041A1

Publication No. US20050009041A1

Sebrication No. US20050009041A1

Septicant: Buchard, Ole

APPLICANT: Buchard, Dater Eigil

APPLICANT: Berg, Rolf Henrik

TITLE OF INVENTION: PEPTIDE NUCLEIC ACIDS AND SYNTHETIC PROCEDURES THEREFOR

CURRENT APPLICATION NUMBER: US/10/755,118

CURRENT APPLICATION NUMBER: US/08/462,977

PRIOR APPLICATION NUMBER: US/08/462,977

PRIOR PILING DATE: 1995-06-05

PRIOR FILING DATE: 1993-11-22

PRIOR PILING DATE: 1993-11-22

PRIOR PILING DATE: 1992-05-22

PRIOR PILING DATE: 1992-05-22
APPLICANT: Liu, Wei
TITLE OF INVENTION: COMPOSITIONS AND METHODS FOR DIAGNOSING AND TREATING COLON
TITLE OF INVENTION: CANCERS
FITLE OF INVENTION: CANCERS
FITLE OF INVENTION: CANCERS
FILE REFERENCE: AMIO0927 (031896-002000)
CURRENT PILLING DATE: 2003-01-06
PRIOR APPLICATION NUMBER: US Provisional Application 60/438,000
PRIOR APPLICATION NUMBER: US Provisional Application 60/438,000
PRIOR PILLING DATE: 2003-01-06
NUMBER OF SEQ ID NOS: 54873
SOFTWARE: Patentin version 3.2
SEQ ID NO 48150
LENGTH: 21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ; FEATURE:
; OTHER INFORMATION: G allele fragment of hypothetical sequence of Fig. 37.
18-10-839-686-23
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       .
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Query Match
0.3%; Score 16.2; DB 1; Length 21;
Best Local Similarity 85.7%; Pred. No. 5.2e+02;
Matches 18; Conservative 0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                               0.3%; Score 16.2; DB 1; Length 21; 85.7%; Pred. No. 5.2e+02; tive 0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             APPLICANT: Sequencm, Inc.
TITLE OP INVENTION: A Method for Identifying Polymorphisms FILLS REFERENCE: 7011463001.
CURRENT APPLICATION NUMBER: US/10/839,686
CURRENT FILING DATE: 2004-05-04
NUMBER OF SEQ ID NOS: 25
SOFTWARE: Patentin version 3.1
IENGTH: 21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     3757 GGTGCTGTCCAGCTTCTTGGA 3777
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                3057 AGTTGATCTTGTTAAAACCAA 3077
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sequence 23, Application US/10839686; Publication No. US20050053972A1; GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        21 derécrercaerricices 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           21 AGTAGATCTTGATGAAACCAA 1
                                                                                                                                                                                                                                                                                                                                                                                                                                             Query Match 0.3
Best Local Similarity 85.7
Matches 18; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TYPE: DNA ORGANISM: Artificial
                                                                                                                                                                                                                                                                                                                                 ; TYPE: RNA
; ORGANISM: RNAi
US-10-751-736-48150
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                RESULT 599
US-10-755-118-94/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         RESULT 598
US-10-839-686-23/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         요
```

```
Sequence 3, Application US/10608863

Publication No. US20040214192A1

GENERAL INFORMATION:

GENERAL INFORMATION:

APPLICANT: Hashida, Ryoichi

APPLICANT: Yayoi, Yoshihiro

APPLICANT: Saito, Hirohisa

TITLE OF INVENTION: METHODS FOR EXAMINATION FOR ALLERGIC DISEASES, AND DRUGS FOR TREATITLE OF INVENTION: METHODS FOR EXAMINATION FOR CURRENT APPLICANTON NUMBER: US/10/608,863

FILE REFERENCE: 3462.1003-000

CURRENT APPLICATION NUMBER: US/10/608,863

CURRENT FILING DATE: 2003-06-27
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       US-09-780-533A-643/C

US-09-780-533A-643/C

; Sequence 643, Application US/09780533A
; Publication No. US20030060611A1
; GENERAL INFORMATION:
APPLICANT: Ribozyme Pharmaceuticals, Inc.
APPLICANT: Blatt, Lary
APPLICANT: McSwiggen, Jim
APPLICANT: Chowrira, Bharat
APPLICANT: Chowrira, Bharat
APPLICANT: McSwiggen, Jim
APPLICANT: Chowrira, Bharat
APPLICANT: Chowrira, Bharat
APPLICANT: Chowrira, Bharat
APPLICANT: Chowrira, Bore
TILE REFERENCE: MBHB00,878-A (400/011)
CURRENT PILLORION NUMBER: US/09/780,533A
CURRENT PILLOR DATE: 2010-102-09
PRIOR PILLING DATE: 2000-02-11
NUMBER OF SEQ ID NOS: 6679
SOPTWARE: Patentin version 3.0
SEQ ID NO 643
LENGROW 17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ..
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Query Match 0.3%; Score 16; DB 1; Length 17; Best Local Similarity 100.0%; Pred. No. 4.5e+02; Matches 16; Conservative 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                              Length 16;
                                                                                                                                                                                                                                                                                                                                                                                                                           Query Match
0.3%; Score 16; DB 1; Length 16;
Best Local Similarity 100.0%; Pred. No. 4.2e+02;
Matches 16; Conservative 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                   OTHER INFORMATION: Synthetic Construct
                   PRIOR FILING DATE: 1992-04-15
PRIOR PRING DATE: 1992-04-15
PRIOR APPLICATION NUMBER: DN 987/91
PRIOR PILING DATE: 1991-05-24
PRIOR FILING DATE: 1991-05-24
NUMBER: OF SEQ ID NOS: 157
SOFTWARE: Patentin version 3.2
SEQ ID NO 94
LENGTH: 16
TYPE: DNA
ORGANISM: Artificial Sequence
PRIOR APPLICATION NUMBER: DN 510/92
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               3735 TTTAGCCATAGCATCT 3750
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                5025 AAAAAAAAAAAAA 5040
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  17 TTTAGCCATAGCATCT 2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 16 AAAAAAAAAAAAAA 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ; ORGANISM: Homo sapiens
US-09-780-533A-643
                                                                                                                                                                                                                                                                                                                                                                                      US-10-755-118-94
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TYPE: RNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              RESULT 601
```

g

ઠ

```
Sequence 5, Application US/09380728A
Patent No. US20020081583A1
Patent No. US20020081583A1
Patent No. US20020081583A1
APPLICANT: Nodama, Hirofuni
APPLICANT: Kodama, Hirofuni
APPLICANT: Kodama, Hirofuni
APPLICANT: Kodama, Hirofuni
APPLICANT: Rodama, Hirofuni
APPLICANT: Rodama, Hirofuni
APPLICANT: Nodama, Hirofuni
TITLE OF INVENTION: same, solid phases for detection of the same and preparation meth
FILE REFERENCE: 400327
CURRENT PRELIGATION NUMBER: US/09/380,728A
CURRENT FILING DATE: 1999-09-08
NUMBER OF SEQ ID NOS: 19
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ; NAME/KEY: misc_feature
; OTHER INFORMATION: a synthetic probe nucleic acid, 5'-terminus:Phosphorylated,
; OTHER INFORMATION: 3'-terminus:Biotin
US-09-380-728A-5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     0; Сарв
                                                                                                                                                                                                                                                                                                                                                                                                  ; OTHER INFORMATION: Description of Artificial Sequence:Artificially; OTHER INFORMATION: Synthesized Primer Sequence US-10-608-863-5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Sequence 34, Application US/09945952A

Publication No. US20020177137A1

GENERAL INFORMATION:

APPLICANT: Hodge, Timethy A.

TITLE OF INVENTION: System for Automated Transgenic Screening
FILE REFERENCE: 02313.41500

CURRENT PELICATION NUMBER: US/09/945,952A

CURRENT FILING DATE: 2001-12-06

PRIOR PELICATION NUMBER: 66/230,371

PRIOR PILING DATE: 2000-06-09

NUMBER OF SEQ ID NOS: 40

SOFTWARE PATENTING DATE: 2000-06-09

SOFTWARE PATENTING DATE: 2001-15-06

SOFTWARE PATENTING DATE: 2003-06-09

SOFTWARE PATENTING DATE: 2003-06-09
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Length 17;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        DB 1; Length 20; 5.1e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Indela
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Query Match
0.3%; Score 16; DB 1; Le
Best Local Similarity 100.0%; Pred. No. 4.5e+02;
Matches 16; Conservative 0; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Query Match 0.3%; Score 16; DB Best Local Similarity 100.0%; Pred. No. 5.1 Matches 16; Conservative 0; Mismatches
                                PRIOR APPLICATION NUMBER: JP 2002-188490
PRIOR FILING DATE: 2002-06-27
NUMBER OF SEQ ID NOS: 18
SEQ ID NO 5
LENGTH: 17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        5050 AAAAAAAAAAAAC 5065
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    PatentIn version 3.0
                2003-06-27
                                                                                                                                                                                                                                                                            TYPE: DNA
ORGANISM: Artificial Sequence
FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TYPE: DNA ORGANISM: Artificial Sequence FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 16 AAAAAAAAAAAAA 1
                CURRENT FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           US-09-945-952A-34
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    US-09-380-728A-5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            SOFTWARE: ISEQ ID NO 5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          RESULT 605
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            sequence 4, Application US/10608863

publication No. US20040214192A1

GENERAL INFORMATION:
APPLICANT: Hashida, Ryoichi
APPLICANT: Sugita, Yuji
APPLICANT: Sugita, Yuji
APPLICANT: Sugita, Yuji
APPLICANT: Satc, Hirohisa
TITLE OF INVENTION: ALLERGIC DISEASES, AND DRUGS FOR TREA
TITLE OF INVENTION: ALLERGIC DISEASES
TITLE OF INVENTION: ALLERGIC DISEASES
TITLE OF INVENTION: ALLERGIC DISEASES
CURRENT PLICATION NUMBER: US/10/608,863
CURRENT PLING DATE: 2002-06-27
PRIOR PLING DATE: 2002-06-27
NUMBER OF SEQ ID NOS: 18
SOFTWARE: Patentin Ver. 2.0
SOFTWARE: Patentin Ver. 2.0
LENGTH: 17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Sequence 5, Application US/10608863
Publication No. US20040214192A1
GENERAL INFORMATION:
APPLICANT: Kagaya, Shinji
APPLICANT: Kagaya, Shinji
APPLICANT: Sugita, Yuji
APPLICANT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ô
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Сарв
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Gaps
                                                                                                                                                                                                                                                                                                                                 ; OTHER INFORMATION: Description of Artificial Sequence:Artificially; OTHER INFORMATION: Synthesized Primer Sequence
US-10-608-863-3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       OTHER INFORMATION: Description of Artificial Sequence:Artificially OTHER INFORMATION: Synthesized Primer Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Query Match 0.3%; Score 16; DB 1; Length 17; Best Local Similarity 100.0%; Pred. No. 4.5e+02; Matches 16; Conservative 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                0.3%; Score 16; DB 1; Length 17;
100.0%; Pred. No. 4.5e+02;
tive 0; Mismatches 0; Indels
PRIOR APPLICATION NUMBER: JP 2002-188490
PRIOR FILING DATE: 2002-06-27
NUMBER OF SEQ ID NOS: 18
SOFTWARE: PatentIn Ver. 2.0
SEQ ID NO 3
LENGTH: 17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           5024 TAAAAAAAAAAAA 5039
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 5050 AAAAAAAAAAAAC 5065
                                                                                                                                                                                                                                        TYPE: DNA ORGANISM: Artificial Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TYPE: DNA ORGANISM: Artificial Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     17 TAAAAAAAAAAAA 2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          16 AAAAAAAAAAAAAC 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Query Match
Best Local Similarity 100.
Matches 16; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       RESULT 602
US-10-608-863-4/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                RESULT 603
US-10-608-863-5/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        US-10-608-863-4
```

g

```
TYPE: DNA
ORGANISM: Homo sapiens
                                                                                                                                                                                                                                                                                                                                              US-10-714-796-233
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         RESULT 610
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ;
                                                                                                          ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       US-10-316-755-44/C
US-10-316-755-44/C
US-10-316-755-44/C
US-10-316-755-44/C
Sequence 44, Application US/10316755
Publication No. US20040110152A1
FUBENERAL INFORMATION:
APPLICANT: Lex M. Cowsert
TITLE OF INVENTION: MODULATION OF MATRIX METALLOPROTEINASE 11 EXPRESSION
FILE REPERENCE: RTS-0301
CURRENT APPLICATION UNMBER: US/10/316,755
CURRENT FILING DATE: 2002-12-10
NUMBER OF SEQ ID NOS: 277
SEQ ID NO 44

LENGTH: 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       0; Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Gaps
                                                                                                          Gaps
                                                                                                                                                                                                                                                                                Sequence 34, Application US/10233942
; Sequence 34, Application US/10233942
; Publication No. US20030165922A1
; Publication No. US20030165922A1
; GENERAL INFORMATION:
   APPLICANT: Hodge, Timothy et al
   TITLE OF INVENTION: System for Automated Transgenic Screening
   FILE REFERENCE: 02131.41500
; CURRENT APPLICATION NUMBER: US/10/233,942
; CURRENT APPLICATION NUMBER: 60/230,371
PRIOR PILING DATE: 2000-06-09
; NUMBER OF SEQ ID NOS: 40
; SOFTWARE: PatentIn version 3.1
; SEQ ID NO 34
LENGTH: 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ö
                                                                                                          ..
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Query Match

0.3%; Score 16; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 5.1e+02;
Matches 16; Conservative 0; Mismatches 0; Indels
                                                         Query Match

0.3%; Score 16; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 5.1e+02;
Matches 16; Conservative 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   0.3%; Score 16; DB 1; Length 20;
100.0%; Pred. No. 5.1e+02;
tive 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 OTHER INFORMATION: Antisense Oligonucleotide
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ORGANISM: Streptomyces hygroscopicus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ; Sequence 233, Application US/10714796
; ORGANISM: Streptomyces hygroscopicus
US-09-945-952A-34
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1610 AGGATTTGGGCAACAT 1625
                                                                                                                                                     1610 AGGATTTGGGCAACAT 1625
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       47 TGCTGGGCTGCAGCA 62
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         2 AGGATTTGGGCAACAT 17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ORGANISM: Artificial Sequence
                                                                                                                                                                               2 AGGATTTGGGCAACAT 17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Best Local Similarity
Matches 16; Conserva
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 RESULT 608
US-10-714-796-233
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        US-10-316-755-44
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   US-10-233-942-34
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TYPE: DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TYPE: DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ò
                                                                                                                                                          ઠ
                                                                                                                                                                                                 g
```

```
ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ö
publication No. US20040180847A1

GENERAL INFORMATION:
APPLICANT: Dobie, Kenneth W.
TITLE OF INVENTION: ANTISENSE MODULATION OF KINESIN-LIKE 1 EXPRESSION
TITLE OF INVENTION: ANTISENSE MODULATION OF KINESIN-LIKE 1 EXPRESSION
FILE REFERENCE: ISHT-1004
CURRENT APPLICATION NUMBER: US/10/714,796
CURRENT PILING DATE: 2003-11-17
PRIOR PLING DATE: 2002-05-23
NUMBER OF SEQ ID NOS: 237
SOFTWARE: Patentin version 3.2
SEQ ID NO 233
LENGTH: 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          US-IU-607-806-25/C
Sequence 25, Application US/10607806
Publication No. US20050014158A1
JGBURRAL INFORMATION:
APPLICANT: Adam, Gail Isabel Reid
APPLICANT: Langdown, Maria L.
APPLICANT: Dennis, Edward
APPLICANT: Cantor, Charles
APPLICANT: Reini, Byton
TITLE OF INVENTION: THERAPEUTIC METHODS FOR REDUCING FAT
TITLE OF INVENTION: THERAPEUTIC METHODS FOR REDUCING FAT
TITLE OF INVENTION: USPECSION
TITLE OF INVENTION: USPECSION
CURRENT PLING DATE: 2003-00-27
FILE REPRENCE: 2545-2003200
CURRENT PLING DATE: 2002-06-27
PRIOR APPLICATION NUMBER: 60/392,362
PRIOR APPLICATION NUMBER: 60/392,362
NUMBER OF SEQ ID NOS: 78
SOFTWARE: FastSEQ for Windows Version 4.0
LENGHAL 20
LENG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Length 20;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Query Match
0.3%; Score 16; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 5.1e+02;
Matches 16; Conservative 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Length 20;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Ouery Match 0.1%; Score 16; DB 1; Le:
Best Local Similarity 100.0%; Pred. No. 5.1e+02;
Matches 16; Conservative 0; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              %2-10-644-052A-376/c
; Sequence 376, Application US/10644052A
; Publication No. US20050059619A1
; GENERAL INFORMATION:
    APPLICANT: Krieg, Arthur M
; APPLICANT: Samulowitz, Ulrike
; APPLICANT: Vollmer, Joerg
; APPLICANT: Uhlmann, Eugen
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       3760 GCTGTCCAGCTTCTTG 3775
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               3488 CACCACCACCTGGATG 3503
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TYPE: DNA ORGANISM: Artificial Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             5 CACCACCACCTGGATG 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             16 GCTGTCCAGCTTCTTG 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ; OTHER INFORMATION: primer US-10-607-806-25
```

```
2988 GAGCCATCTTCATGAT 3003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       2988 GAGCCATCTTCATGAT 3003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TYPE: DNA ORGANISM: Artificial Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            s cacccarcrrcardar 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TYPE: DNA ORGANISM: Artificial Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   5 GAGCCATCTTCATGAT 20
                                      20 AAAAAAAAAAAAAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         US-09-928-796A-12
                                                                                                           RESULT 612
US-09-928-796A-6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          a
                                      셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Query Match 0.3%; Score 16; DB 1; Length 20; Best Local Similarity 100.0%; Pred. No. 5.1e+02; Matches 16; Conservative 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Query Match

0.3%; Score 16; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 5.1e+02;
Matches 16; Conservative 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ## APPLICANT: Unlument, eugen.
## APPLICANT: Jurk, Marion.
## APPLICANT: Jurk, Marion.
## APPLICANT: Rankin, Robert
## TITLE OF INVENTION: InWINDOSTIMULATORY NUCLEIC ACIDS
## TITLE OF INVENTION: InWINDOSTIMULATORY NUCLEIC ACIDS
## TITLE OF INVENTION: INWINDER: US/10/644,052A
## CURRENT APPLICATION NUMBER: US 60/404,479
## RIOR FILING DATE: 2002-08-19
## PRIOR FILING DATE: 2002-08-19
## RIOR FILING DATE: 2002-08-19
## RIOR RILING DATE: 2002-18-19
## RIOR RILING DATE: 2002-11-27
## PRIOR FILING DATE: 2002-11-27
## PRIOR FILING DATE: 2003-10-14
## NUMBER OF SEQ ID NOS: 388
## SOFTWARE: PatentIn version 3.2
## SEQ ID NOS: 388
APPLICANT: Jurk, Marion
APPLICANT: Lipford, Grayson
APPLICANT: Rankin, Robert
TITLE OF INVENTION: IMMUNOSTIMULATORY NUCLEIC ACIDS
FILE REFERENCE: C1037.70048US00
CURRENT APPLICATION NUMBER: US 10/404,052A
CURRENT PILING DATE: 2003-08-19
PRIOR PRILING DATE: 2002-08-19
PRIOR FILING DATE: 2002-11-27
PRIOR FILING DATE: 2002-11-27
PRIOR FILING DATE: 2003-08-14
NUMBER OF SEQ ID NOS: 388
SOFTWARE: Patentin version 3.2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ) OTHER INFORMATION: Synthetic Oligodeoxynucleotide US-10-644-052A-376
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ; OTHER INFORMATION: Synthetic Oligodeoxynucleotide
US-10-644-052A-377
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       RESULT 611
US-10-644-052A-377/c
Sequence 377, Application US/10644052A
Publication No. US20050059619A1
GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    5050 AAAAAAAAAAAAAC 5065
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                APPLICANT: Krieg, Arthur M
APPLICANT: Samulowitz, Ulrike
APPLICANT: Vollmer, Josep
APPLICANT: Uhlmann, Eugen
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TYPE: DNA
ORGANISM: Artificial sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TYPE: DNA
ORGANISM: Artificial sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               20 AAAAAAAAAAAAAAC S
                                                                                                                                                                                                                                                                                                                                                                                                                                  SEQ ID NO 376
LENGTH: 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        APPLICANT:
APPLICANT:
APPLICANT:
APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               요
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ð
```

```
ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Gapa
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ö
Sequence (Application US/09928796A)
Fatent No. US20020042086A1
GENERAL INFORMATION:
APPLICANT: Schwarz, Margaret A.
APPLICANT: Schwarz, Margaret A.
APPLICANT: Gebb, Sarah A.
TITLE OF INVENTION: Methods of Facilitating Vascular Growth
FILE REFERENCE: EMAP2 and Vascularization
CURRENT APPLICATION NUMBER: US/09/928,796A
FILE REFERENCE: EMAP2 and Vascularization
CURRENT APPLICATION NUMBER: US/09/928,796A
FILE REFERENCE DATE: 1999-11-12
NUMBER OF SEQ ID NOS: 12
SOFTWARE: Patentin Ver. 2.0
SEQ ID NO 6
LENGTH::21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Sequence 12, Application US/09928796A
Fatent No. US20020042086A1
GENERAL INFORMATION:
APPLICANT: Schwarz, Margaret A.
APPLICANT: Schwarz, Margaret A.
APPLICANT: Gebb, Sarah A.
TITLE OF INVENTION: Methods of Facilitating Vascular Growth
FILE REFERENCE: EMAP2 and Vascularization
CURRENT APPLICATION NUMBER: US/09/928,796A
FILE REFERENCE: EMAP2 and Vascularization
CURRENT APPLICATION NUMBER: US/09/928,796A
FILENG APPLICATION NUMBER: US/09/139,616
FRIOR FILING DATE: 1999-11-12
NUMBER OF SEQ ID NOS: 12
SOFTWARE: Patentin Ver. 2.0
SEQ ID NO 12
LENGTH: 21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence: primer
US-09-928-796A-12
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ; OTHER INFORMATION: Description of Artificial Sequence: primer
US-09-928-796A-6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Query Match 0.3%; Score 16; DB 1; Length 21; Best Local Similarity 100.0%; Pred. No. 5.3e+02; Matches 16; Conservative 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Query Match 0.3%; Score 16; DB 1; Length 21; Best Local Similarity 100.0%; Pred. No. 5.3e+02; Matches 16; Conservative 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ; Sequence 36, Application US/10871302
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       RESULT 614
US-10-871-302-36/c
```

Gaps

```
GENERAL INFORMATION:

GENERAL INFORMATION:

APPLICANT: Ribozyme Pharmaceuticals, Inc.

APPLICANT: Ribozyme Pharmaceuticals, Inc.

APPLICANT: McSwiggen, James

TITLE OF INVENTION: RAM Interference Mediated Inhibition of Epidermal Growth Factor Re

TITLE OF INVENTION: Gene Expression Using Short Interfering RNA

TITLE OF INVENTION: Gene Expression Using Short Interfering RNA

FILE REFERENCE: 900/042 (MBHB02-468-A)

FILE REFERENCE: 900/042 (MBHB02-468-A)

FILE REFERENCE: 900/042 (MBHB02-468-A)

FRICH APPLICATION NUMBER: US 60/393,924

PRIOR FILING DATE: 2002-07-03

PRIOR PELING DATE: 2002-07-03

PRIOR FILING DATE: 2002-02-06

PRIOR PELING DATE: 2001-02-25

PRIOR PELING DATE: 2001-07-25

SPRIOR PELING D
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        , OTHER INFORMATION: Description of Artificial Sequence: Target sequence/sinA sense r0S-10-251-117-247
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   APPLICANT: McSwiggen, James
TITLE OF INVENTION: RNA Interference Mediated Inhibition of Epidermal Growth Factor R
TITLE OF INVENTION: Gene Expression Using Short Interfering RNA
FILE REPERENCE: 900/042 (MBHB02-468-A)
CURRENT APPLICATION NUMBER: US/10/251,117
CURRENT FILING DATE: 2003-02-24
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ö
                                                                                                                                                                                                                                                                                                                                                                                                                                         ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                             Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ö
                                                                                                                                                                                                                                                                                                                                                                                                                                             ..
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Query Match 0.3%; Score 15.8; DB 1; Length 19; Best Local Similarity 89.5%; Pred. No. 5.1e+02; Matches 17; Conservative 0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                            Length 21;
                                                                                                                                                                                                                                                                                                                                                                                                                                             0; Indels
                                                                                                                                                                                                                                                                                                                                                                     Query Match
0.3%; Score 16; DB 1; Lv
Best Local Similarity 100.0%; Pred. No. 5.3e+02;
Matches 16; Conservative 0; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     RESULT 618
US-10-251-117-496
IS-10-251-117-496
Sequence 496, Application US/10251117
Publication No. US20030170891A1
GENERAL INFORMATION:
APPLICANT: Ribozyme Pharmaceuticals, Inc.
CURRENT FILING DATE: 2004-05-19
PRIOR APPLICATION NUMBER: US 60/471,729
PRIOR FILING DATE: 2003-05-20
NUMBER OF SEQ ID NOS: 14937
SOFTWARE: PatentIn version 3.2
SEQ ID NO 3426
LENGTH: 21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Sequence 247, Application US/10251117
Publication No. US20030170891A1
GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         5024 TAAAAAAAAAAAAAA 5042
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          19 TAAAAAAACAAAACAAAA 1
                                                                                                                                                                                                                                               TYPE: RNA; ORGANISM: RNAi-antisense strand
US-10-847-918-3426
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    955 ITCCAGATCCTGACAG 970
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ORGANISM: Artificial Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     16 rrccagarccrgacag 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                RESULT 617
US-10-251-117-247/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               APPLICANT: Mycum APPLICANT: Be, Xiaobing
APPLICANT: Liu, Wei
APPLICANT: Liu, Wei
APPLICANT: Slonim, Donna
APPLICANT: Slonim, Donna
APPLICANT: Howes, Steve
TITLE OF INVENTION: Compositions and Methods for Diagnosing and Treating Cancers
FILE REFERENCE: 031896-026000 (AMI01264)
CURRENT APPLICATION NUMBER: US/10/847,918
CURRENT APPLICATION NUMBER: US 60/471,729
PRIOR FILING DATE: 2003-05-20
NUMBER OF SEQ ID NOS: 14937
SOFTWARE: PatentIn version 3.2
SEQ ID NO 3424
LENGTH: 21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             APPLICANT: Liu, Wei
APPLICANT: Liu, Wei
APPLICANT: Slonim, Donna
APPLICANT: Howes, Steve
TITLE OF INVENTION: Compositions and Methods for Diagnosing and Treating Cancers
FILE REFERENCE: 031896-026000 (AMI01264)
CURRENT APPLICATION NUMBER: US/10/847,918
                                                                                                                         5, 6 and 7 gene
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Gaps
                     Publication No. US20050003418A1
GENERAL INFORMATION:
APPLICANT: SAMSUNG ELECTRONICS CO. LTD.
TITLE OF INVENTION: Multiplex PCR primer set for human MODY 1, 4, 5
TITLE OF INVENTION: amplification
FILE REFERENCE: S1004345
CURRENT APPLICATION NUMBER: US/10/871,302
CURRENT FILING DATE: 2004-06-19
NUMBER OF SEQ ID NOS: 42
SOFTWARE: Kopatentin 1.71
SEQ ID NO 36
LENGTH: 21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   0.3%; Score 16; DB 1; Length 21; 100.0%; Pred. No. 5.3e+02; tive 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       0.3%; Score 16; DB 1; Length 21;
100.0%; Pred. No. 5.3e+02;
tive 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       RESULT 616
US-10-847-918-3426/c
US-10-847-918-3426/c
Sequence 3426, Application US/10847918
; Publication No. US20050119210A1
; GENERAL INFORMATION:
; APPLICANT: Wyeth
; APPLICANT: Be, Xiaobing
; APPLICANT: Liu, Wei
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Sequence 3424, Application US/10847918
; Sequence 100 US20050119210A1
; GENERAL INFORMATION:
APPLICANT: Wyeth
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1547 ACATGGCCCAGTTTGC 1562
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      955 TTCCAGATCCTGACAG 970
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        6 TTCCAGATCCTGACAG 21
                                                                                                                                                                                                                                                                                                                                                                                                                                                    TYPE: DNA
ORGANISM: Artificial Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             19 ACATGGCCCAGTTTGC 4
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Query Match 0.3
Best Local Similarity 100.
Matches 16; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Best Local Similarity 100.
Matches 16; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    FEATURE:

COTHER INFORMATION: primer

US-10-871-302-36
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TYPE: DNA
ORGANISM: Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        US-10-847-918-3424
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  US-10-847-918-3424
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Query Match
```

엄 ₽

셤 8

```
TITLE OF INVENTION: RNA Interference Mediated Inhibition of HIV Gene Expression Using FITLE OF INVENTION: Interfering RNA FILLE OF INVENTION: Interfering RNA FILLE REFERENCE: 400/054 (MBHB01-665-B) CURRENT APPLICATION NUMBER: US/10/225,023 CURRENT FILING DATE: 2003-01-06 PRIOR APPLICATION NUMBER: US 60/398,036 PRIOR APPLICATION NUMBER: US 60/398,036 PRIOR FILING DATE: 2002-07-23 PRIOR PRIOR PRIOR DATE: 2002-05-29 PRIOR FILING DATE: 2002-05-29 PRIOR FILING DATE: 2002-05-29 PRIOR FILING DATE: 2002-05-29 NUMBER OF SEQ ID NOS: 1494 SOFTWARE: Patentin Version 3.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Sequence 4157, Application US/10349143

Fublication No. US20040005584A1

GENERAL INFORMATION:

Jubication No. US20040005584A1

SEQUENCE INFORMATION:

APPLICANT: Cohen, Daniel

APPLICANT: Chumakov, Ilya

Juluenfeld, Marta

APPLICANT: Chumakov, Ilya

TITLE OF INVENTION: Biallelic markers for use in constructing a high density...

FILE REFERENCE: GENEST.020CF1

CURRENT APPLICATION NUMBER: US/09/422,978

FRIOR APPLICATION NUMBER: US/09/422,978

FRIOR APPLICATION NUMBER: EARLIER APPLICATION NUMBER: US 09/298,850

FRIOR FILING DATE: EARLIER FILING DATE: 1999-04-21

FRIOR FILING DATE: EARLIER FILING DATE: 1998-11-23

FRIOR FILING DATE: EARLIER FILING DATE: 1998-04-21

FRIOR APPLICATION NUMBER: EARLIER APPLICATION NUMBER: US 60/009,732

FRIOR FILING DATE: EARLIER FILING DATE: 1998-04-21

FRIOR APPLICATION NUMBER: EARLIER APPLICATION NUMBER: US 60/002,614

FRIOR SEQ ID NOS: 11796

SEQ ID NO 4157
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ; OTHER INFORMATION: Description of Artificial Sequence: sinA antisense region
US-10-225-023-838
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ; OTHER INFORMATION: upstream amplification primer 99-13598 for SEQ 223, US-10-349-143-4157
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Query Match
0.3%; Score 15.8; DB 1; Length 19;
Best Local Similarity 89.5%; Pred. No. 5.1e+02;
Matches 17; Conservative 0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Length 19;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Score 15.8; DB 1;
Pred. No. 5.1e+02;
0; Mismatches 2;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 RESULT 622
US-10-883-218-138/c
; Sequence 138, Application US/10883218
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             4405 GCAGGAAGTACTAGTTCCC 4423
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             3884 CTGGAGCACAGTCTGTTCT 3902
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 19 GCAGGAACTACTAGTACCC 1
                                                                                                                                                                                                                                                                                                                                                                                                                              TYPE: RNA
ORGANISM: Artificial Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   0.3%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 creeaecreacrererrer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Query Match 0.3°
Best Local Similarity 89.5
Matches 17, Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ORGANISM: Homo Sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       NAME/KEY: primer_bind LOCATION: 1..19
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             US-10-349-143-4157/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TYPE: DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Sequence 100, Application US/10255023

Sequence 100, Application US/10255023

Publication No. US20030175950A1

GENERAL INFORMATION:

APPLICANT: Ribozyme Pharmaceuticals, Inc.

APPLICANT: McSwiggen, James

TITLE OF INVENTION: RNA Interference Mediated Inhibition of HIV Gene Expression Using

TITLE OF INVENTION: Interfering RNA

FILE REFERENCE: 400/054 (MRH801-665-B)

CURRENT APPLICATION NUMBER: US 10/225,023

CURRENT FILING DATE: 2002-07-23

PRIOR FILING DATE: 2002-07-23

PRIOR FILING DATE: 2002-05-29

WINDER OF SEQ ID NOS: 1494

SOFTWARE: Patentin version 3.0

SEQ ID NO 100

SEQ ID NO 100
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence: Target sequence/sinA sense
US-10-225-023-100
                                                                                                                                                                                                                                                                                                                                                                                                                                                  ; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence: sinA antisense region
US-10-251-117-496
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Query Match 0.3%; Score 15.8; DB 1; Length 19; Best Local Similarity 73.7%; Pred. No. 5.1e+02; Matches 14; Conservative 3; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Score 15.8; DB 1; Length 19;
Pred. No. 5.1e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1; Mismatches
PRIOR APPLICATION NUMBER: US 60/393,924
PRIOR FILING DATE: 2002-07-03
PRIOR PLILNG DATE: 2002-06-06
PRIOR PLILNG DATE: 2002-06-06
PRIOR PLILNG DATE: 2002-02-20
PRIOR PLILNG DATE: 2002-02-20
PRIOR PLILNG DATE: 2001-07-25
PRIOR PLILNG DATE: 2001-07-25
PRIOR PLILNG DATE: 2001-07-25
PRIOR PLILNG DATE: 2001-07-25
PRIOR PLING DATE: 2001-06-06
NUMBER OF SEQ ID NOS: 1213
SOFTWARR: PARENTIN VERSION 3.0
SOFTWARR: PARENTIN VERSION 3.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Sequence 838, Application US/10225023
Publication No. US20030175950A1
GENERAL INFORMATION:
APPLICANT: Ribozyme Pharmaceuticals, Inc.
APPLICANT: McSwiggen, James
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              5024 TAAAAAAAAAAAAAA 5042
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              4405 GCAGGAAGTACTAGTTCCC 4423
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1 UAAAAAACAAAAAA 19
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1 GCAGGAACUACUAGUACCC 19
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 0.3%;
                                                                                                                                                                                                                                                                                                                                                                                              TYPE: RNA
ORGANISM: Artificial Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ORGANISM: Artificial Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Ouery Match
Best Local Similarity 84.21
Matches 16; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 RESULT 620
US-10-225-023-838/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 RESULT 619
US-10-225-023-100
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Best Loca
Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         g
```

ઠે

```
; OTHER INFORMATION: Description of Artificial Sequence: Target Sequence/siNA sense re
US-10-892-922-73
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Sequence 166, Application US/10892922
Sequence 166, Application US/10892922
Sequence 166, Application Vo. US20050124569A1
SENERAL INFORMATION:
APPLICANT: Sirna Therapeutics, Inc.
APPLICANT: Guerciolini, Robert
APPLICANT: McSwiggen, James
TITLE OF INVENTION: Was Interference Mediated Inhibition of CXCR4 Gene Expression
TITLE OF INVENTION: Using Short Interfering Nucleic Acid (siNA)
FILE REFERENCE: 400-198
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 APPLICANT: Sirns Therapeutics, Inc.
APPLICANT: Guerciolini, Roberto
APPLICANT: Guerciolini, Roberto
APPLICANT: Guerciolini, Roberto
APPLICANT: McSwiggen, James
TITLE OF INVENTION: RNA Interference Mediated Inhibition of CXCR4 Gene Expression
TITLE OF INVENTION: Using Short Interfering Nucleic Acid (sink)
FILE REPERRENCE: 400-198
CURRENT APPLICATION NUMBER: US/10/892,922
CURRENT APPLICATION NUMBER: US/10/892,922
SURRENT FILING DATE: 2964-07-16
SOFTWARE: PatentIn version 3.3
SEQ ID NO 73
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        , OTHER INFORMATION: Description of Artificial Sequence: siNA antisense region
US-10-883-218-540
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ô
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ö
PRIOR APPLICATION NUMBER: US 10/444,853
PRIOR APPLICATION NUMBER: US 10/427,160
PRIOR PILING DATE: 2003-05-23
PRIOR PLILING DATE: 2003-04-30
PRIOR PLILING DATE: 2003-02-20
PRIOR APPLICATION NUMBER: PCT/US03/05028
PRIOR PILING DATE: 2003-02-20
PRIOR FILING DATE: 2003-02-20
PRIOR FILING DATE: 2000-02-20
PRIOR FILING DATE: 2000-02-20
PRIOR FILING DATE: 2000-02-30
Remaining Prior Application data removed - See File Wrapper or PALM.
NUMBER OF SEQ ID NOS: 930
SOFTWARE: PATENTH VERSION 3.3
SEQ ID NO 540
LENGTH: 19
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Query Match 0.3%; Score 15.8; DB 1; Length 19;
Best Local Similarity 36.8%; Pred. No. 5.1e+02;
Matches 7; Conservative 10; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Length 19;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Query Match 0.3%; Score 15.8; DB 1;
Best Local Similarity 63.2%; Pred. No. 5.1e+02;
Matches 12; Conservative 5; Mismatches 2;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 4650 ACTGATTTGTATAAATTTT 4668
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          US-10-892-922-73
; Sequence 73, Application US/10892922
; Publication No. US20050124569Al
; GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              3351 CTTACCATCCACCTATCAG 3369
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TYPE: RNA
ORGANISM: Artificial Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TYPE: RNA
ORGANISM: Artificial Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      US-10-892-922-166/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             RESULT 625
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     GENERAL INFORMATION:

GENERAL INFORMATION:

GENERAL INFORMATION:

GENERAL INFORMATION:

GENERAL INFORMATION:

APPLICANT: Sirna Therapeutics, Inc.

APPLICANT: Macberli, Peter

APPLICANT: Machine Therapeutics, Inc.

APPLICANT: Mover Therapeutics, Inc.

FILE REFERENCE: 2004-07-01

FRIOR APPLICATION NUMBER: US 10/89, 966

FRIOR PILING DATE: 2004-04-16

FRIOR FILING DATE: 2004-04-14

FRIOR FILING DATE: 2004-04-14

FRIOR FILING DATE: 2003-11-24

FRIOR FILING DATE: 2003-11-24

FRIOR FILING DATE: 2003-11-24

FRIOR FILING DATE: 2003-10-23

FRIOR FILING DATE: 2003-10-23
                                                                   GRENEAL INCORMATION:
APPLICANT: Sirna Therapeutics, Inc.
APPLICANT: Sirna Therapeutics, Inc.
APPLICANT: Habberli, Peter
APPLICANT: MASSIGNA, James
TITLE OF INVENTION: URA Interference Mediated Inhibition of TRDM7 Gene Expression
TITLE OF INVENTION: URA Interference Mediated Inhibition of TRDM7 Gene Expression
TITLE OF INVENTION: URA INTERIOR SIGNA, 105 (MRH904-535)
CURRENT APPLICATION NUMBER: US/10/883,218
CURRENT FILING DATE: 2004-07-01
PRIOR APPLICATION NUMBER: US/10/826,966
PRIOR FILING DATE: 2004-01-14
PRIOR PILING DATE: 2004-01-14
PRIOR PELING DATE: 2004-01-14
PRIOR PELING DATE: 2003-10-23
PRIOR PELING DATE: 2003-05-24
PRIOR PELING DATE: 2003-05-39
PRIOR PELING DATE: 2003-05-39
PRIOR PELING DATE: 2003-05-30
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ; OTHER INFORMATION: Description of Artificial Sequence: Target Sequence/siNA sense
US-10-883-218-138
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Query Match

0.3%; Score 15.8; DB 1; Length 19;
Best Local Similarity 89.5%; Pred. No. 5.1e+02;
Matches 17; Conservative 0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     3351 CTTACCATCCACCTATCAG 3369
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        19 CTTCCCATCCACATATCAG 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TYPE: RNA
ORGANISM: Artificial Sequence
                            Publication No. US20050124567A1
GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     US-10-883-218-540
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            SEQ ID NO 138
LENGTH: 19
```

8 셤

```
APPLICANT: McSwiggen, Jeanes
APPLICANT: Beigelman, Leonid
APPLICANT: Haeberli, Pete
APPLICANT: Haeberli, Pete
TITLE OF INVENTION: RNA Interference Mediated Inhibition of Polycomb Group Protein
TITLE OF INVENTION: EX12 Gene Expression Using Short Interfering Nucleic Acid (sina)
FILE REPRENCE: 400/211 (MBHB03-074-C)
CURRENT APPLICATION NUMBER: US/10/923,580
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    OTHER INFORMATION: Description of Artificial Sequence: sinA antisense region
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ô
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CURRENT FILING DATE: 2004-0916

PRIOR FILING DATE: 2004-0916

PRIOR FILING DATE: 2004-02-13

PRIOR FILING DATE: 2003-02-13

PRIOR FILING DATE: 2003-02-13

PRIOR FILING DATE: 2002-11-19

PRIOR FILING DATE: 2002-11-19

PRIOR FILING DATE: 2004-04-16

PRIOR PLICATION NUMBER: US 10/826,966

PRIOR PLICATION NUMBER: US 10/757,803

PRIOR FILING DATE: 2004-01-14

PRIOR FILING DATE: 2003-01-14

PRIOR FILING DATE: 2003-01-14

PRIOR FILING DATE: 2003-11-24

PRIOR FILING DATE: 2003-11-24

PRIOR FILING DATE: 2003-11-24

PRIOR PLICATION NUMBER: US 10/693,059

PRIOR FILING DATE: 2003-05-23

PRIOR FILING DATE: 2003-05-23

PRIOR FILING DATE: 2003-05-23

PRIOR FILING DATE: 2003-02-20

PRIOR F
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    0; Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CURRENT APPLICATION NUMBER: US/09/453,234
CURRENT FILING DATE: 1999-12-01
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Sequence 4, Application US/09453234
Publication No. US20030091995A1
GENERAL INFORMATION:
APPLICANT: Buechler, Joe
APPLICANT: Valkirs, Gunars
APPLICANT: Gray, Jeff
TAPPLICANT: Gray, Human Artional
TITLE OF INVENTION: Human Artibodies
FILE REFERENCE: 020015-000110US
                                                                                                                                                                                                                                                       Sequence 296, Application US/10923580 Publication No. US20050159382A1 GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  5020 ACTGTAAAAAAAAAAA 5038
                                                                                                                                                                                                                                                                                                                                                                                                APPLICANT: Sirna Therapeutics, Inc.
                                             1 ACUUGAAAAAAAAAA 19
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ACTTGAAAAAAAAAAAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ORGANISM: Artificial Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Best Local Similarity
Matches 17; Conserv
                                                                                                                                                                                                                       JS-10-923-580-296/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  JS-09-453-234-4/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             US-10-923-580-296
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TYPE: RNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Query Match
                                             d
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ద
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       US-10-9243-980-148

10-9243-980-148

10-9243-980-148

10-9243-980-148

10-9243-980-148

10-9243-980-148

10-9243-980-148

10-9243-980-148

10-9243-980-148

10-9268-980-148-980-148

10-9268-980-148-980-148-980-148-980-148-980-148-980-148-980-148-980-148-980-148-980-148-980-148-980-148-980-148-980-148-980-148-980-148-980-148-980-148-980-148-980-148-980-148-980-148-980-148-980-148-980-148-980-148-980-148-980-148-980-148-980-148-980-148-980-148-980-148-980-148-980-148-980-148-980-148-980-148-980-148-980-148-980-148-980-148-980-148-980-148-980-148-980-148-980-148-980-148-980-148-980-148-980-148-980-148-980-148-980-148-980-148-980-148-980-148-980-148-980-148-980-148-980-148-980-148-980-148-980-148-980-148-980-148-980-148-980-148-980-148-980-148-980-148-980-148-980-148-980-148-980-148-980-148-980-148-980-148-980-148-980-148-980-148-980-148-980-148-980-148-980-148-980-148-980-148-980-148-980-148-980-148-980-148-980-148-980-148-980-148-980-148-980-148-980-148-980-148-980-148-980-148-980-148-980-148-980-148-980-148-980-148-980-148-980-148-980-148-980-148-980-148-980-148-980-148-980-148-980-148-980-148-980-148-980-148-980-148-980-148-980-148-980-148-980-148-980-148-980-148-980-148-980-148-980-148-980-148-980-148-980-148-980-148-980-148-980-148-980-148-980-148-980-148-980-148-980-148-980-148-980-148-980-148-980-148-980-148-980-148-980-148-980-148-980-148-980-148-980-148-980-148-980-148-980-148-980-148-980-148-980-148-980-148-980-148-980-148-980-148-980-148-980-148-980-148-980-148-980-148-980-148-980-148-980-148-980-148-980-148-980-148-980-148-980-148-980-148-980-148-980-148-980-148-980-148-980-148-980-148-980-148-980-148-980-148-980-148-980-148-980-148-980-148-980-148-980-148-980-148-980-148-980-148-980-148-980-148-980-148-980-148-980-148-980-148-980-148-980-148-980-148-980-148-980-148-980-148-980-148-980-148-980-148-980-148-980-148-980-148-980-148-980-148-980-148-980-148-980-148-980-148-980-148-980-148-980-148-980-148-980-148-980-148-980-148-980-148-980-148-980-148-980-148-980-148-980-148-980-148-980-148-980-148-980-148-9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ; OTHER INFORMATION: Description of Artificial Sequence: Target Sequence/siNA sense.x
US-10-923-580-148
                                                                                                                                                                                                                                                                                                                                                                                                                                ; OTHER INFORMATION: Description of Artificial Sequence: sinA anitsense region US-10-892-922-166
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      PRIOR APPLICATION UNMER: US 60/427,467
PRIOR FILING DATE: 2002-11.19
PRIOR PILING DATE: 2002-11.19
PRIOR PLING DATE: 2002-11.19
PRIOR PELICATION NUMBER: US 60/427,467
PRIOR APPLICATION NUMBER: US 10/826,966
PRIOR APPLICATION NUMBER: US 10/757,803
PRIOR PILING DATE: 2004-01-14
PRIOR PELING DATE: 2004-01-14
PRIOR PELING DATE: 2003-11-23
PRIOR PILING DATE: 2003-11-23
PRIOR PLING DATE: 2003-11-23
PRIOR PELING DATE: 2003-12-23
PRIOR PELING DATE: 2003-02-23
PRIOR PELING DATE: 2003-02-20
PRIOR PELING DATE: 2003-02-20
PRIOR PILING DATE: 2003-02-20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Query Match 0.3%; Score 15.8; DB 1; Length 19; Best Local Similarity 84.2%; Pred. No. 5.1e+02; Matches 16; Conservative 1; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Length 19;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Score 15.8; DB 1; Length 1
Pred. No. 5.1e+02;
0; Mismatches 2; Indels
                                CURRENT APPLICATION NUMBER: US/10/892,922
CURRENT FILING DATE: 2004-07-16
NUMBER OF SEQ ID NOS: 206-07-16

SOFTWARE: Patentin version 3.3

SEQ ID NO 166

LENGTH: 19
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              4650 ACTGATTTGTATAAATTTT 4668
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       5020 ACTGTAAAAAAAAAAA 5038
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ACTTATTATATATATTT 1
                                                                                                                                                                                                                                                                                           TYPE: RNA
ORGANISM: Artificial Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Query Match
Best Local Similarity 89.5%;
Matches 17; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ORGANISM: Artificial Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              SEQ ID NO 148
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     19
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ò
```

```
US-10-148-844-6/C

US-10-148-844-6/C

Sequence 6, Application US/10148844

Publication No. US20030096403A1

GENERAL INFORMATION:

APPLICANT: Hyo-Jeong Hong

APPLICANT: Keun-Soo Kim

TITLE OF INVENTION: A HUMANIZED ANTIBODY TO SURFACE ANTIGEN S OF HEPATITIS B

TITLE OF INVENTION: VIRUS AND A PREPARING METHOD THEREOF

TITLE OF INVENTION: VIRUS AND A PREPARING METHOD THEREOF

TITLE OF INVENTION: VIRUS AND A PREPARING METHOD THEREOF

FILE REFERENCE: 118.15-US-WO

CURRENT FILING DATE: 2002-06-03

PRIOR PLILING DATE: 2000-10-02

PRIOR FILING DATE: 2000-10-02

NUMBER OF SEQ ID NOS: 52

SOFTWARE: FastSEQ for Windows Version 4.0

SEQ ID NO 6

LENGTH: 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ;
                                               ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ô
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Gaps
                                               Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ö
                                                  ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Length 20;
                                                                                                                                                                                                                US-10-094-546-1/C

Sequence 1, Application US/10094546

Sequence 1, Application US/10094546

Sequence 1, Application US/20020197677A1

GENERAL INFORMATION:
APPLICANT: Schmaljohn, Comnie S.
TITLE OF INVENTION: Antibodies Expressed in Insect Cells
FILE REFERENCE: 003/245/SAP

CURRENT FILIATION NUMBER: US/10/094,546

CURRENT PAPLICATION NUMBER: US 60/274,164

PRIOR APPLICATION NUMBER: 2002-06-12

RIOR APPLICATION NUMBER: 2001-03-08

NUMBER OF SEQ ID NOS: 4

SOFTWARE: Apple Macintosh Microsoft Word 6.0

SEQ ID NO 1

LENGTH: 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Query Match 0.3%; Score 15.8; DB 1; Length 20; Best Local Similarity 89.5%; Pred. No. 5.3e+02; Matches 17; Conservative 0; Mismatches 2; Indels
0.3%; Score 15.8; DB 1; Length 20;
89.5%; Pred. No. 5.3e+02;
tive 0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Query Match
0.3%; Score 15.8; DB 1;
Best Local Similarity 89.5%; Pred. No. 5.3e+02;
Matches 17; Conservative 0; Mismatches 2;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ; OTHER INFORMATION: linker sequence US-10-094-546-1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     366 CCTCCACCACAGCCCATC 384
                                                                                                    4079 GGTTCCAGTTGCCAATTTC 4097
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   366 CCTCCACCAACAGCCCATC 384
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              19 ccrccaccaagggcccarc 1
                                                                                                                                               20 GCTTCCAGTTTCCAATTTC 2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TYPE: DNA ORGANISM: Artificial Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TYPE: DNA ORGANISM: Artificial sequence
                Query Match
Best Local Similarity 89.5
Matches 17; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            OTHER INFORMATION: HC US-10-148-844-6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     g
                                                                                                           ઠે
                                                                                                                                                    d
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Sequence 6, Application US/09908671
Publication No. US20030138928A1
GENERAL INFORMATION:
APPLICANT: CARSON, DENNIS A.
APPLICANT: CARSON, DENNIS A.
INGRATION: NOBORI, TUMOR SUPPRESSOR GENE AND METHODS FOR
TITLE OF INVENTION: TUMOR SUPPRESSOR GENE AND METHODS FOR
                                                                                                                                                                                                                                                                                                                                             ö
                                                                                                                                                                                                                                                                                                                                               Gaps
                                                                                                                                                                                                  FEATURE: Oligo 952 OTHER INFORMATION: Description of Artificial Sequence: Oligo 952 US-09-453-234-4
                                                                                                                                                                                                                                                                                                                                               ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             COMPUTER READABLE FORM:
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
FILING DATE: 18-Jul-2001
CLASSIFICATION: <UNknown>
                                                                                                                                                                                                                                                                                                                                               2; Indels
                                                                                                                                                                                                                                                                                             0.3%; Score 15.8; DB 1; Length 89.5%; Pred. No. 5.3e+02; tive 0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      NUMBER OF SEQUENCES: 18
CORRESPONDENCE ADDRESS:
ADDRESSEE: Fish & Richardson P.C.
STREET: 4225 Executive Square, Suite 1400
CITY: La Jolla
STATE: California
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     PRIOCARDSLEATOR.

PRIOCATION DATA:

APPLICATION NUMBER: US/08/227,800

FILING DATE: 14-APR-1994

ATTORNEY/AGENT INFORMATION:

NAME: HOWELLS, STACY L.

REGISTRATION NUMBER: 34,842

REPERENCE/DOCKET NUMBER: 07340/023001

TELEPHONE: 619/678-5070

TELEPHONE: 619/678-5099

INFORMATION FOR SEQ ID NO: 6:

SEQUENCE CHARACTERISTICS:

LENGTH: 20 base pairs
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             LOCATION: 1..20
SEQUENCE DESCRIPTION: SEQ ID NO: 6:
                     PRIOR APPLICATION NUMBER: US 60/157,415
PRIOR FILING DATE: 1999-10-02
NUMBER OF SEQ ID NOS: 112
SEQ ID NO 4
LENGTH: 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TREATMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TOPOLOGY: linear
MOLECULE TYPE: DNA (genomic)
                                                                                                                                                                                                                                                                                                                                                                                      366 CCTCCACCAACAGCCCATC 384
                                                                                                                                                                                                                                                                                                                                                                                                                          19 CCTCCACCAAGGGCCCATC 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TYPE: nucleic acid
STRANDEDNESS: single
                                                                                                                                                                     TYPE: DNA ORGANISM: Artificial Sequence
                                                                                                                                                                                                                                                                                                         Query Match 0.33
Best Local Similarity 89.5
Matches 17; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       IMMEDIATE SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            NAME/KEY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                RESULT 629
US-09-908-671-6/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                US-09-908-671-6
                                                                                                                                                                                                                                                                                                                                                                                                    ò
```

```
APPLICANT: Sim, Gek-Kee
APPLICANT: Sim, Gek-Kee
APPLICANT: Sim, Gek-Kee
APPLICANT: Sim, Gek-Kee
TITLE OF INVENTION: ACID MOLECULES, AND USES THEREOF
TITLE OF INVENTION: ACID MOLECULES, AND USES THEREOF
TITLE OF INVENTION: ACID WOMBER: US/10/262,439
TITLE OF INVENTION: ADDITOR: 1999-12-01
FILE REFERENCE: IM-2-C2
CURRENT APPLICATION NUMBER: US/09/451,527
FILE REPLIANT ON THE CONTROL OF CONTROL O
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ; OTHER INFORMATION: Description of Artificial Sequence: Synthetic; CTHER INFORMATION: Primer
US-10-262-439-143
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Query Match

0.3%; Score 15.8; DB 1;
Best Local Similarity 89.5%; Pred. No. 5.3e+02;
Matches 17; Conservative 0; Mismatches 2;
Application US/10262439
o. US20030143196A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       3920 ATGGCTCTCTGGTTGGCTG 3938
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TYPE: DNA
ORGANISM: Artificial Sequence
FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   17; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Best Local Similarity
Matches 17; Conserve
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                JS-10-167-241-3/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       US-10-167-241-3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               원
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Sequence 39, Application US/10000213
Publication No. US20030125271A1
GENERAL INFORMATION:
APPLICANT: Brenda F. Baker
APPLICANT: Kenneth Dobie
TITLE OF INVENTION: ANTISENSE MODULATION OF VITAMIN D NUCLEAR RECEPTOR EXPRESSION
FILE REFERENCE: RTS-0327
CURRENT APPLICANION NUMBER: US/10/000,213
CURRENT FILING DATE: 2001-11-14
NUMBER OF SEQ ID NOS: 94
IENGTH: 20
                                                                                                                                                                                                                                                                                                                              APPLICANT: Yang, Shumin
APPLICANT: Yang, Shumin
APPLICANT: Dreitz, Matthew J.
APPLICANT: Dreitz, Matthew J.
APPLICANT: Dreitz, Matthew J.
TITLE OF INVENTION: CANINE AND USES THEREOF
TITLE OF INVENTION: ACID MOLECULES, AND USES THEREOF
FILE REFERENCE: IM-2-C1
CURRENT APPLICATION NUMBER: US/10/218,654
CURRENT FILING DATE: 2002-08-13
PRIOR APPLICATION NUMBER: US/09/322,409
PRIOR APPLICATION NUMBER: 60/087,306
PRIOR FILING DATE: 1999-05-29
NUMBER OF SEQ ID NOS: 154
SOFTWARE: PATENTIN VOY: 2.0
SEQ ID NO 143
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ; OTHER INFORMATION: Description of Artificial Sequence: Synthetic; OTHER INFORMATION: Primer
US-10-218-654-143
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Query Match 0.3%; Score 15.8; DB 1; Length 20; Best Local Similarity 89.5%; Pred. No. 5.3e+02; Matches 17; Conservative 0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Query Match
0.3%; Score 15.8; DB 1; Length 20;
Best Local Similarity 89.5%; Pred. No. 5.3e+02;
Matches 17; Conservative 0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ) OTHER INFORMATION: Antisense Oligonucleotide US-10-000-213-39
                                                                                                                                                                                  Sequence 143, Application US/10218654; Publication No. US20030099609A1; GENERAL INFORMATION: APPLICANT: Sim, Gek-Kee
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   3920 ATGCCTCTCTGGTTGGCTG 3938
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          302 AGAGCTTTCCCAGTTCTCC 320
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1 Arccccrcrccrcrcacrc 19
   19 CCTCCACCAAGGGCCCATC 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                20 AGAGCTGTCCCAGCTCTCC 2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TYPE: DNA ORGANISM: Artificial Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TYPE: DNA ORGANISM: Artificial Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         FEATURE:
용
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ઠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            원
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ò
```

Gaps

ö

IndelB

Length 20;

```
JULIANO DE LA APPLICATION US/10167241

PUBLICATION NO. US20030165895A1

GENERAL INFORMATION:

APPLICANT: CZERNIAK, BOGDAN

APPLICANT: JOHNSTON, DENNIS

TITLE OF INVENTION: METHODS OF DETECTING, DIAGNOSING AND TREATING CANCER

TITLE OF INVENTION: METHODS OF DETECTING, DIAGNOSING AND TREATING CANCER

TITLE OF INVENTION: METHODS OF DETECTING, DIAGNOSING AND TREATING CANCER

TITLE OF INVENTION: ADDIDATE: 2002-06-11

CURRENT FILING DATE: 2002-06-11

PRIOR APPLICATION NUMBER: 60/297,813

PRIOR FILING DATE: 2001-06-12

NUMBER OF SEQ ID NOS: 20

SOUTHWARE: PATENTIN VET: 2.1

LENGTH: 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       0.3%; Score 15.8; DB 1; Length 20;
89.5%; Pred. No. 5.3e+02;
tive 0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                OTHER INFORMATION: Description of Artificial Sequence: OTHER INFORMATION: Primer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      4079 GGTTCCAGTTGCCAATTTC 4097
1 Aresecrerciestricaeris 19
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TYPE: DNA
ORGANISM: Artificial Sequence
FEATURE:
```

RESULT 636

RESULT 634 US-10-262-439-143

```
US-10-665-216-107
Sequence 107, Application US/10665216
Sequence 107, Application Ws/10665216
Debication No. US20040043957A1
Seneral information:
APPLICANT: Brenda F. Baker
APPLICANT: Susan M. Freier
APPLICANT: Susan M. Freier
APPLICANT: Andrew T. Watt
TITLE OF INVENTION: ANTISENSE MODULATION OF UROKINASE PLASMINOGEN ACTIVATOR EXPRESSION
FILE REFERENCE: RTS-0189
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ; Sequence 89, Application US/10173718
; Sequence 89, Application US/10173718
; Publication No. US20030232437A1
; GENERAL INFORMATION:
; APPLICANT: Hong Zhang
; APPLICANT: Kenneth W. Dobie
; TITLE OF INVENTION: ANTISENSE MODULATION OF VEGF-C EXPRESSION
; TITLE OF INVENTION: ANTISENSE WOODLATION OF VEGF-C
; CURRENT APPLICATION VUMBER: US/10/173,718
; CURRENT FILING DATE: 2002-06-17
; NUMBER OF SEQ ID NOS: 125
; SEQ ID NO 89
; LENGTH: 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           .;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         .
0
                                                                                                                                          Sequence 19, Application US/10173718

Publication No. US20030232437A1

GENERAL INFORMATION:

APPLICANT: Hong Janag

APPLICANT: Kenneth W. Dobie

TITLE OF INVENTION: ANTISENSE MODULATION OF VEGF-C EXPRESSION

FILE REFERENCE: PTS-0036

CURRENT APPLICATION NUMBER: US/10/173,718

CURRENT FILING DATE: 2002-06-17

NUMBER OF SEQ ID NOS: 125

SEQ ID NO 19

LENGTH: 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Score 15.8; DB 1; Length 20;
Pred. No. 5.3e+02;
0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Query Match
0.3%; Score 15.8; DB 1; Length 20;
Best Local Similarity 89.5%; Pred. No. 5.3e+02;
Matches 17; Conservative 0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                OTHER INFORMATION: Antisense Oligonucleotide US-10-173-718-19
  4343 CTGGCTCAGATATGAAAAT 4361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      966 GACAGCTGTGGACCAAGCA 984
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         966 GACAGCTGTGGACCAAGCA 984
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                GACATCTGTGGACCAAACA 19
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             20 gacarcreredaccaaaca 2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  0.3%;
                                             20 CTGGCTTAGACATGAAAT
                                                                                                                                                                                                                                                                                                                                                                                                                   TYPE: DNA ORGANISM: Artificial Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Query Match 0.3
Best Local Similarity 89.5
Matches 17; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ORGANISM: H. sapiens
                                                                                                                               US-10-173-718-19/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    US-10-173-718-89
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       US-10-173-718-89
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TYPE: DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             a
    ઠે
                                    d
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Query Match 0.3%; Score 15.8; DB 1; Length 20; Best Local Similarity 89.5%; Pred. No. 5.3e+02; Matches 17; Conservative 0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Query Match
0.3%; Score 15.8; DB 1; Length 20;
Best Local Similarity 89.5%; Pred. No. 5.3e+02;
Matches 17; Conservative 0; Mismatches 2; Indels
                                                           GENERAL INFORMATION:

APPLICANT: BOX, Noil F
APPLICANT: BOX, Noil F
APPLICANT: Hayward, Nicholas K
APPLICANT: Martin, Nicholas G
APPLICANT: Sturm, Richard A
APPLICANT: Gruis, Nelleke A
APPLICANT: Gruis, Nelleke A
APPLICANT: Bergman, Wilma
APPLICANT: Frants, Rune R
APPLICANT: Bergman, Wilma
APPLICANT: BOYS-27U1
CURRENT APPLICATION NUMBER: US/10/108,732
CURRENT FILING DATE: 2001-03-28
PRIOR FILING DATE: 2001-03-28
NUMBER OF SEQ ID NOS: 76
SOFTWARE: PatentIn version 3.1
SEQ ID NO 5
LENGTH: 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ; OTHER INFORMATION: CDKN2A Exon 2 primer US-10-108-732-5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Sequence 13, Application US/10362817
Publication No. US20030186294A1
GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           4079 GGTTCCAGTTGCCAATTTC 4097
Sequence 5, Application US/10108732 Publication No. US20030175721A1 GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      20 GCTTCCAGTTTCCAATTTC 2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TYPE: DNA ORGANISM: Artificial sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TYPE: DNA
ORGANISM: Artificial Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    FEATURE:
COTHER INFORMATION: Primer
US-10-362-817-13
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             US-10-362-817-13/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     FEATURE:
```

```
US-10-476-021-138
         US-10-479-510-1
                                                                                                                                                   δ
                                                                                                                                                                                             셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | Sequence 71, Application US/10292337 | Sequence 71, Application US/10292337 | Sequence 71, Application No. US20040092462A1 | GENERAL INFORMATION: GENERAL INFORMATION: APPLICANT: C. Frank Bennett APPLICANT: Renneth W. Dobie | TITLE OF INVENTION: MODULATION OF ENDOTHELIAL DIFFERENTIATION GENE 2 EXPRESSION FILE REPERENCE: PTS-0058 | CURRENT APPLICATION NUMBER: US/10/292,337 | CURRENT FILING DATE: 2002-11-13 | SEQ ID NOS: 139 | SEQ ID NO 71 | LENGTH: 20
                                                                                                                                                                                                                                                                                                                                                               ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Sequence 1, Application US/10479510

Sequence 1, Application US/10479510

Publication No. US20040157230A1

GENERAL INFORMATION:

APPLICANT: Cavidi Tech AB

TITLE OF INVENTION: Applications of the method.

TITLE OF INVENTION: Applications of the method.

FILE REFERENCE: 110063301

CURRENT APPLICATION NUMBER: US/10/479,510

CURRENT PILING DATE: 2003-12-10

PRIOR PILING DATE: 2001-06-14

NUMBER OF SEQ ID NOS: 12

SOFTWARE: PatentIn Ver. 2.1

SEQ ID NO : LENGTH: 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ó
                                                                                                                                                                                                                                                                                                                                                                 ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          OTHER INFORMATION: Description of Artificial Sequence: template
                                                                                                                                                                                                                                                                                                         Query Match

0.3%; Score 15.8; DB 1; Length 20;
Best Local Similarity 89.5%; Pred. No. 5.3e+02;
Matches 17; Conservative 0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Length 20;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Score 15.8; DB 1;
Pred. No. 5.3e+02;
                                                                                                                                                                                                                                       , OTHER INFORMATION: Antisense Oligonucleotide
US-10-665-216-107
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ; OTHER INFORMATION: AntiBense Oligonucleotide US-10-292-337-71
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               0; Mismatches
CURRENT APPLICATION NUMBER: US/10/665,216
CURRENT FILING DATE: 2003-09-19
PRIOR APPLICATION NUMBER: US/09/821,972
PRIOR FILING DATE: 2001-03-30
NUMBER OF SEQ ID NOS: 168
SEQ ID NO 107
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           4926 ATTTTGTATTGAAAAGAT 4944
                                                                                                                                                                                                                                                                                                                                                                                                         506 TTTCCCGAGGCCTAGGGTA 524
                                                                                                                                                                                                                                                                                                                                                                                                                                                       1 TTTCCCCAGGCCTAGGCTA 19
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1 ATTTTGCAATGAAAAGAT 19
                                                                                                                                                                    TYPE: DNA ORGANISM: Artificial Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ORGANISM: Artificial Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Query Match
Best Local Similarity 89.5%;
Matches 17; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TYPE: DNA
ORGANISM: Artificial Sequence
FEATURE:
                                                                                                                                                                                                                     FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                           ઠ
                                                                                                                                                                                                                                                                                                                                                                                                                                              g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ઠે
```

```
APPLICANT: C. Frank Bennett
APPLICANT: Andrew T. Watt
TILE OF INVENTION: ANTISENSE MODULATION OF TUMOR NECROSIS FACTOR RECEPTOR 2 EXPRESSIC
FILE REFERENCE: RTS-0216
CURRENT PEPLICATION NUMBER: US/10/476,021
CURRENT PILING DATE: 2003-10-24
PRIOR FILING DATE: 2001-04-27
PRIOR FILING DATE: 2001-04-27
SEQ ID NO 138
LENGTH: 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     is Sequence 1687, Application US/10466894

j Publication No. US20040241671A1

GENERAL INFORMATION:

APPLICANT: Telefarmin, Adam

APPLICANT: Thijnder, Marius

TITLE OF INVENTION: SEQUENCES INVOLVED IN PHENOMENA OF TUMOUR SUPRESSION,

TITLE OF INVENTION: TUMOUR REVERSION, APOPTOSIS AND/OR VIRUS RESISTANCE

TITLE OF INVENTION: AND THEIR USE AS MEDICINES

TITLE OF INVENTION: AND THEIR USE AS MEDICINES

TITLE OF INVENTION NUMBER: US/10/466,894

CURRENT FILING DATE: 2003-01-23

PRIOR APPLICATION NUMBER: FRO1/00899

PRIOR FILING DATE: 2001-01-23

NUMBER OF SEQ ID NOS: 2270

SEQ ID NO 1687

LENGTH: 200

LENGTH: 200
                                                               ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 õ
                                                                 Gapa
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Gapв
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ö
                                                               ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Query Match 0.3%; Score 15.8; DB 1; Length 20; Best Local Similarity 89.5%; Pred. No. 5.3e+02; Matches 17; Conservative 0; Mismatches 2; Indels
                                                               Indels
        Score 15.8; DB 1;
Pred. No. 5.3e+02;
0; Mismatches 2;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     OTHER INFORMATION: Antisense Oligonucleotide
                                                                                                                                                                                                                                                                                                          ; Sequence 138, Application US/10476021
; Publication No. US20040186069A1
; GENERAL INFORMATION:
                                                                                                                     4769 TGACTGACTGACTAAATGA 4787
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  4489 CAGAAAGTAGGACCAAGTG 4507
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ) OTHER INFORMATION: n = A,T,C or G
US-10-466-894-1687
                                                                                                                                                  2 TGACTGACTGACTGA 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      20 cagcaagraggagcaagrg 2
0.3%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TYPE: DNA ORGANISM: Artificial Sequence
        Query Match 0.3:
Best Local Similarity 89.5:
Matches 17; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ORGANISM: Homo Sapiens
                                                                                                                                                                                                                                                         RESULT 643
US-10-476-021-138/c
```

```
; OTHER INFORMATION: Antisense compound US-10-831-901A-21488
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              4912 AAATGAATATGTTTATTTT 4930
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   20 AAACGAACATGTTTATTT 2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ORGANISM: Artificial Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Query Match
Best Local Similarity 89.5%;
Matches 17; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TYPE: DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   a
                                                                                                                                                                                                                                                                                                                                                    RESULT 655

US-10-931-901421487/C

IS Sequence 21497, Application US/10831901A

| Publication No. US20050100895A1
| GENERAL INFORMATION:
| APPLICANT: Crocke, Stanley T.
| APPLICANT: Sampath, Rangarajan
| APPLICANT: Bampath, Staven A.
| APPLICANT: Bampath, Staven A.
| APPLICANT: Bampath, C. Fraid
| APPLICANT: Bampath, Sannes
| APPLICANT: Bampath, C. Fraid
| APPLICANT: DATE: 2003-04-26
| PRIOR PILING DATE: 2003-04-26
| PRIOR APPLICANTION NUMBER: 60/468,562
| PRIOR APPLICANTION NUMBER: 60/468,502
| PRIOR APPLICANTION NUMBER: 60/468,503
| PRIOR APPLICANTIO
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ö
                                                                        ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ;
                                                                            ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Length 20;
Query Match 0.3%; Score 15.8; DB 1; Length 20; Best Local Similarity 85.0%; Pred. No. 5.3e+02; Matches 17; Conservative 0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Query Match 0.3%; Score 15.8; DB 1;
Best Local Similarity 89.5%; Pred. No. 5.3e+02;
Matches 17; Conservative 0; Mismatches 2;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           US-10-831-901A-21488/C

Sequence 21488, Application US/10831901A
PUBLICATION NO. US20050100885A1
GENERAL INFORMATION:
APPLICANT: Crooke, Stanley T.
APPLICANT: Sampath, Rangarajan
APPLICANT: Freter, David J.
APPLICANT: Freter, Susan M.
APPLICANT: Hofstadler, Steven A.
APPLICANT: Hofstadler, Steven A.
APPLICANT: Sayayze, Eric
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        OTHER INFORMATION: Antisense compound
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                4912 AAATGAATATGTTTATTT 4930
                                                                                                                                                        5025 AAAAAAAAAAAAAAAAA 5044
                                                                                                                                                                                                                         AAAACAAAAAAAAAAAA 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          19 AAACGAACATGTTTATTT 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ORGANISM: Artificial Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              US-10-831-901A-21487
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ઠે
                                                                                                                                                                                                                             원
```

```
APPLICANT: Bennett, C. Frank,
TITLE OF INVENTION: Compositions And Methods For The Treatment Of Severe
TITLE OF INVENTION: Acute Respiratory Syndrome (SARS)
TITLE OF INVENTION: Acute Respiratory Syndrome (SARS)
FILE REFERENCE: ISISO083-100 (BIOLOGOBUS)
CURRENT APPLICATION NUMBER: US/10/831,901A
CURRENT PILING DATE: 2003-04-28
PRIOR FILING DATE: 2003-04-28
PRIOR FILING DATE: 2003-04-28
PRIOR FILING DATE: 2003-04-30
PRIOR PILING DATE: 2003-04-30
PRIOR PILING DATE: 2003-05-06
PRIOR APPLICATION NUMBER: 60/467,770
PRIOR APPLICATION NUMBER: 60/477,637
PRIOR FILING DATE: 2003-06-06
PRIOR APPLICATION NUMBER: 60/483,579
PRIOR FILING DATE: 2003-06-10
PRIOR APPLICATION NUMBER: 60/483,579
PRIOR FILING DATE: 2003-06-27
NUMBER OF SEQ ID NOS: 3006-3
SOFTWARE: FRAEKEQ for Windows Version 4.0
SEQ ID NO 21488
LENGTH: 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          .
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Score 15.8; DB 1; Length 20;
Pred. No. 5.3e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        PRIOR APPLICATION NUMBER: 2004-04-26
PRIOR PILLING DATE: 2003-04-28
PRIOR PILLING DATE: 2003-04-28
PRIOR PILLING DATE: 2003-05-06
PRIOR PILLING DATE: 2003-05-06
PRIOR PILLING DATE: 2003-05-06
PRIOR PILLING DATE: 2003-05-06
PRIOR PILLING DATE: 2003-06-10
PRIOR PILLING DATE: 2003-06-17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             sequence 29727, Application US/10831901A Publication No. US20050100885A1
```

```
US-10-931-260-167/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Sequence 48, Application US/10825593
Publication No. US20050147604A1
GENERAL INFORMATION:
TITLE OF INVENTION: A Method for Diagnosing and Treating Affective Disorders
FILE REPRENCE: XXX
CURRENT APPLICATION NUMBER: US/10/825,593
CURRENT FILIG DATE: 2004-04-16
NUMBER OF SEQ ID NOS: 111
SOFTWARE: Patentin version 3.1
                                                                                                                                                                                   ô
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ó,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Gaps
                                                                                                                                                                                   ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ô
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ö
                                                                                                                                      Query Match

0.3%; Score 15.8; DB 1; Length 20;
Best Local Similarity 89.5%; Pred. No. 5.3e+02;
Matches 17; Conservative 0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           0.3%; Score 15.8; DB 1; Length 20; 89.5%; Pred. No. 5.3e+02; tive 0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Length 20;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          2; Indels
                                                                                                                                                                                                                                                                                                                                                                                           TITLE OF INVENTION MODULATION OF STATS EXPRESSION TITLE OF INVENTION: MODULATION OF STATS EXPRESSION; FILE REFERENCE: RTS-0569; CURRENT APPLICATION NUMBER: US/10/704,263; CURRENT FILING DATE: 2003-11-06; NUMBER OF SEQ ID NOS: 213; SEQ ID NO 84; LENGTH:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Score 15.8; DB 1;
Pred. No. 5.3e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Query Match
0.3%; Score 15.8; E
Best Local Similarity 89.5%; Pred. No. 5.3e
Matches 17; Conservative 0; Mismatches
                                                                          CTHER INFORMATION: Antisense compound US-10-831-901A-29727
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ; OTHER INFORMATION: Antisense Compound US-10-704-263-84
                                                                                                                                                                                                                                                                                                                                              US-10-704-263-84

Sequence 84, Application US/10704263
Publication No. US20050101013A1
GENERAL INFORMATION
APPLICANT: Sugan M. Preier
APPLICANT: James Karras
                                                                                                                                                                                                                          5022 TGTAAAAAAAAAAAA 5040
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              4304 ACTGTAGTCCTGCAGATGG 4322
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              3303 AACTGTCCAAAATAAAAA 3321
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AACTGTCCCAAAAAAAA 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Acreracrecrecaderice 19
                                                                                                                                                                                                                                                                19 TGACAAAAAAAAAAAA 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TYPE: DNA
ORGANISM: Artificial Sequence
                   TYPE: DNA
ORGANISM: Artificial Sequence
FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ORGANISM: Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Best Local Similarity
Matches 17; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      US-10-825-593-48
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    US-10-825-593-48
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 SEQ ID NO 48
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TYPE: DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Query Match
LENGTH:
                                                                                                                                                                                                                                                              g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ઠ
```

```
Gaрв
                                                   APPLICANT: Griffith, Irwin J.;

APPLICANT: Griffith, Irwin J.;

Pollock, Joanne;

Bond, Julian F.;

Garman, Richard D;

Kuo, Mai-Chang;

Powers, Stephen P.;

Exley, Mark A.;

Chen, Xian;

Shaked, Ze'ev

TITLE OF INVENTION: Allergenic Proteins And Peptides From

UNDMBER OF SEQUENCES: 283
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    0.3%; Score 15.8; DB 1; Length 20;
89.5%; Pred. No. 5.3e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            COMPUTER: IBM PC compatible
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARRE: Patentin Release #1.0, Version #1.25
CURRENT APPLICATION NUMBER: US/10/931,260
FILING DATE: 30-Aug-2004
CLASSIFICATION: <UNKnown>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  NAME: Amy E. Mandragouras, Esq.
REGISTRATION NUMBER: 36,207
REFERENCE/DOCKET NUMBER: IMI-028CD2CCPA2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                FILING DATE: 1994-DEC-06
APPLICATION NUMBER: 08/226,248
FILING DATE: 1994-APR-08
APPLICATION NUMBER: PCT/US93/00139
FILING DATE: 1993-JAN-15
                                                                                                                                                                                                                                                                                                                                                    CORRESPONDENCE ADDRESS: ,
ADDRESSEE: Lahive & Cockfield, LLP
STREET: 28 State St
CITY: Boston
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               APPLICATION NUMBER: PCT/US92/05661
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 PRIOR APPLICATION DATA:
APPLICATION NUMBER: US/09/240,203
FILING DATE: 29-04n-1999
APPLICATION NUMBER: 08/467,023
FILING DATE: 1995-JUN-06
APPLICATION NUMBER: 08/350,225
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TOPOLOGY: linear MOLECULE TYPE: CDNA SEQUENCE DESCRIPTION: SEQ ID NO: 167:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    APPLICATION NUMBER: 07/938,990
FILING DATE: 1992-SEP-01
APPLICATION NUMBER: 07/730,452
FILING DATE: 1991-JUL-15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            APPLICATION NUMBER: 07/729,134
FILING DATE: 1991-JUL-12
APPLICATION NUMBER: 07/975,179
FILING DATE: 1992-NOV-12
Sequence 167, Application US/10931260 Publication No. US20050152927A1 GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   FILING DATE: 1992-JUL-10 ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TELECOMMUNICATION INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ZIP: 02109
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TELEFAX: (617) 742-42
INFORMATION FOR SEQ ID NO: 167:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Best Local Similarity 89.5
Matches 17; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TELEPHONE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                    STATE: MA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          COUNTRY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       US-10-931-260-167
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Query Match
```

ô

RESULT 650

8 g

```
Sequence 379, Application US/10786720

Sequence 379, Application US/10786720

Sequence 379, Application No. US20040191818A1

Publication No. US20040191818A1

GENERAL INFORMATION:

APPLICANT: Wyeth

APPLICANT: Wyeth

APPLICANT: O'Toole, Margot

APPLICANT: Liu, Wei

TITLE OF INVENTION: DISFASES

TITLE OF INVENTION UNMERR: US/10/786,720

CURRENT APPLICANTON NUMBER: US/10/786,720

CURRENT PILING DATE: 2004-02-26

NUMBER OF SEQ ID NOS: 21135

SOFTWARE: Patentin version 3.2

LENGTHEN: 21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ô
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ö
                                                                                                                                  ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Gaps
                                                                                                                                  Gaps
                                                                                                                                                                                                                                                                                                                                                                                                       RESULT 653
US-10-479-510-2
i Sequence 2, Application US/10479510
; Publication No. US20040157230A1
; GENERAL INFORMATION:
   APPLICANT: Cavidi Tech AB
   TITLE OF INVENTION: A method for measuring DNA polymerization and
   TITLE OF INVENTION: applications of the method.
   FILE REFERENCE: 110061501
; CURRENT APPLICATION NUMBER: US/10/479,510
; CURRENT FILING DATE: 2003-12-10
; PRIOR PILING DATE: 2001-06-14
; NUMBER OF SEQ ID NOS: 12
; SOFTWARR: PatentIn Ver. 2.1
; SEQ ID NO
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ö
                                                                                                                                      ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ; OTHER INFORMATION: Description of Artificial Sequence: template US-10-479-510-2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Score 15.8; DB 1; Length 21;
Pred. No. 5.5e+02;
0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Length 21;
                                                           Length 21;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Indels
                                                                                                                                          Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Query Match

0.3%; Score 15.8; DB 1;
Best Local Similarity 89.5%; Pred. No. 5.5e+02;
Matches 17; Conservative 0; Mismatches 2;
                                                           0.3%; Score 15.8; DB 1;
89.5%; Pred. No. 5.5e+02;
:ive 0; Mismatches 2;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 4769 TGACTGACTGACTAAATGA 4787
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 847 GCATCTGAGAAAGCAGCTA 865
                                                                                                                                                                                                                     4736 TTTTCAAAATTATGTCTCC 4754
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        rcacrcacrcacrcacrca 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        19 GCATCTAATAAGCAGCTA 1
                                                                                                                                                                                                                                                                                            3 rrrrcaaaargargrccc 21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  0.3%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ORGANISM: Artificial Sequence FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Query Match
Best Local Similarity 89.5
Matches 17; Conservative
                                                                                                      Best Local Similarity 89.5
Matches 17; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ORGANISM: Homo sapiens
US-10-786-720-379
US-10-349-143-8727
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TYPE: DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TYPE: DNA
                                                                               Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            셤
                                                                                                                                                                                                                                     ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        NAMESTICS NAME  
NAMES NAME  
NAMESTICS NAMES NA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Sequence 8127, Application US/10349143

Sequence 8127, Application No. 2020040005584A1

GENERAL INFORMATION:
GENERAL INFORMATION:
GENERAL INFORMATION:
TOLUMAKOV, ILVA
TITLE NOF INVENTION: Biallelic markers for use in constructing a high density...
TITLE REPERENCE: GENSET. 020CP1
CURRENT FILING DATE: 2003-01-21
CURRENT FILING DATE: 1999-10-21
FILING DATE: 1999-10-20

PRIOR FILING DATE: EARLIER FILING DATE: 1999-04-21
PRIOR FILING DATE: EARLIER FILING DATE: 1999-04-21
PRIOR FILING DATE: EARLIER FILING DATE: 1998-04-21

PRIOR FILING DATE: EARLIER FILING DATE: 1998-04-21

PRIOR FILING DATE: EARLIER FILING DATE: 1998-04-21

NUMBER OF SEQ ID NOS: 11796

SEQ ID NO 8727

LENGTH: 21

LENGTH: 21

LENGTH: 21
                                                                                                                                                                                                                                                                         Sequence 13, Application US/10135629

Sequence 13, Application US/2013557A1

Sequence 13, Application No. US20030073657A1

Publication No. US20030073657A1

GRNERAL INFORMATION:

APPLICANT: Halle, Jorn-Peter

APPLICANT: Halle, Jorn-Peter

APPLICANT: Hof, Peter

TITLE OF INVENTION: Use of Alpha 1-Antichymotrypsin

TITLE OF INVENTION: Use of Alpha 1-Antichymotrypsin

TITLE OF INVENTION: Which is Expressing an ACT Polypeptide, or a Nucleic Acid

TITLE OF INVENTION: Encoding It, For Treatment and/or Prevention of

TITLE OF INVENTION: and For Identifying Pharmacologically Active Substances

TITLE OF INVENTION: and For Identifying Pharmacologically Active Substances

TITLE OF INVENTION UNMERR: US 10121225.0

FILE REFERENCE: 2001-04-30

FRIOR APPLICATION NUMBER: US 60/323,348

FRIOR FILING DATE: 2001-04-30

FRIOR APPLICATION NUMBER: US 60/323,348

FRIOR FILING DATE: 2001-09-18

NUMBER OF SEQ ID NOS: 18

SEQ ID NO 13

LENGTH. 13
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Query Match 0.1%; Score 15.8; DB 1; Length 21; Best Local Similarity 89.5%; Pred. No. 5.5e+02; Matches 17; Conservative 0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        3258 CATTIGIGICCCTTIGICA 3276
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   cagridrerecentrerea 21
                                                           75
                                                                                                              GCAGAAGCTGAAGTGCAGT 2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TYPE: DNA
ORGANISM: Homo Sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TYPE: DNA ORGANISM: Mus musculus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          RESULT 652
US-10-349-143-8727
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          US-10-135-629-13
                                                               57
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               LENGTH:
```

ð 셤

```
APPLICANT: Martinez, Robert
APPLICANT: Martinez, Robert
APPLICANT: Barom, Eugene
APPLICANT: Liu, Wei
TITLE OF INVENTION: COMPOSITIONS AND METHODS FOR DIAGNOSING AND TREATING COLON
TITLE OF INVENTION: CANCERS
FILE REPERENCE: AM100927 (031996-002000)
CURRENT APPLICATION NUMBER: US/10/751,736
CURRENT APPLICATION NUMBER: US/10/751,736
FILOR APPLICATION NUMBER: US Provisional Application 60/438,000
PRIOR APPLICATION NUMBER: US Provisional Application 60/438,000
PRIOR PILING DATE: 2003-01-06
NUMBER OF SEQ ID NOS: 54873
SOFTWARE: Patentin version 3.2
SEQ ID NO 2182
LENGTH: 21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   APPLICANT: Martinez, Robert
APPLICANT: Martinez, Robert
APPLICANT: Brown, Eugene
APPLICANT: Brown, Eugene
APPLICANT: Liu, Wei
TITLE OF INVENTION: CANCERS
FILE REFERENCE: AM100927 (031896-002000)
CURRENT APPLICATION NUMBER: US/10/781,736
CURRENT FILING DATE: 2003-01-06
PRIOR APPLICATION NUMBER: US Provisional Application 60/438,000
PRIOR FILING DATE: 2003-01-06
                                                                                                                                                                                                                                                                                                                                                                   ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ö
CURRENT FILING DATE: 2003-01-06
PRIOR PAPLICATION NUMBER: US Provisional Application 60/438,000
PRIOR FILING DATE: 2003-01-06
NUMBER OF SEQ ID NOS: 54873
SEPTWARE: Patentin version 3.2
SEQ ID NO 1933
LENGTH: 21
                                                                                                                                                                                                                                                                                                                                                                   Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Indele
                                                                                                                                                                                                                                                                                                      Score 15.8; DB 1;
Pred. No. 5.5e+02;
0; Mismatches 2;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Score 15.8; DB 1;
Pred. No. 5.5e+02;
0; Mismatches 2;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Sequence 2182, Application US/10751736
Publication No. US20040265230A1
GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Sequence 7896, Application US/10751736
Publication No. US20040265230A1
GENERAL INFORMATION:
APPLICANT: Wyeth
                                                                                                                                                                                                                                                                                                                                                                                                                      4840 AAGAATCAGCCAGCCAACA 4858
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  4840 AAGAATCAGCCAGCCAACA 4858
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          2 AAGAATCAGCTAGCAAACA 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     3 AAGAATCAGCTAGCAAACA 21
                                                                                                                                                                                                                                                                                                      Query Match 0.3%;
Best Local Similarity 89.5%;
Matches 17; Conservative (
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Query Match 0.3%;
Best Local Similarity 89.5%;
Matches 17; Conservative (
                                                                                                                                                                                           ; TYPE: DNA
; ORGANISM: homo sapiens
US-10-751-736-1933
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TYPE: DNA
CRGANISM: homo sapiens
US-10-751-736-2182
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        JS-10-751-736-2182
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    US-10-751-736-7896
                                                                                                                                                                                                                                                                                                                                                                                                                         ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   엄
                                     Sequence 14848, Application US/10786720

Publication No. US20040191818A1

Publication No. US20040191818A1

GENERAL INFORMATION:

APPLICANT: Wyeth

APPLICANT: Wyeth

APPLICANT: Correct Compositions and methods for Diagnosing and Treating Autoimmune

TITLE OF INVENTION: COMPOSITIONS AND METHODS FOR DIAGNOSING AND TREATING AUTOIMMUNE

TITLE OF INVENTION: DISEASES

FILE REFERENCE: 031896-023000 (AM101331L)

CURRENT APPLICATION UNMBER: US/10/786,720

CURRENT PILING DATE: 2004-02-26

NUMBER OF SEQ ID NOS: 21135

SOFTWARE: Patentin version 3.2

SEQ ID NO 14848
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Sequence 14850, Application US/10786720

Sequence 14850, Application US/10786720

Publication No. US20040191818A1

GENERAL INPORMATION:

APPLICANT: Wyeth

APPLICANT: O'TOOle, Margot

APPLICANT: O'TOOle, Wei

TITLE OF INVENTION: COMPOSITIONS AND METHODS FOR DIAGNOSING AND TREATING AUTOIMMUNE

TITLE OF INVENTION: DISBASES

FILE REFERENCE: 031896-023000 (AM101331L)

CURRENT APPLICATION NUMBER: US/10/786,720

CURRENT FILING DATE: 2004-02-26

NUMBER OF SEQ ID NOS: 21135

SOFTWARE: PALENTIN version 3.2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sequence 1933, Application US/10751736
Publication No. US20040265230A1
GENERAL INFORMATION:
APPLICANT: Watth
APPLICANT: Martinez, Robert
APPLICANT: Liu, Wei
TITLE OF INVENTION: COMPOSITIONS AND METHODS FOR DIAGNOSING AND TREATING COLON
TITLE OF INVENTION: CANCERS
FILE REPRENCE: AM10927 (031896-002000)
CURRENT APPLICATION NUMBER: US/10/751,736
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Query Match 0.3%; Score 15.8; DB 1; Length 21; Best Local Similarity 89.5%; Pred. No. 5.5e+02; Matches 17; Conservative 0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  0.3%; Score 15.8; DB 1; Length 21; 89.5%; Pred. No. 5.5e+02; tive 0; Mismatches 2; Indel8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   3696 ACGAGTCAAGACGCTCACA 3714
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           3696 ACGAGTCAAGACGCTCACA 3714
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       2 Accadicaactcaca 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  20 ACGAGTCAAGTGGCTCACA 2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ORGANISM: RNAi-antisense strand
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Query Match
Best Local Similarity 89.5
Matches 17; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TYPE: DNA
ORGANISM: Homo sapiens
US-10-786-720-14848
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       US-10-786-720-14850/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         US-10-786-720-14850
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            SEQ ID NO 14850
LENGTH: 21
```

a

8

g

ઠે

```
Sequence 21929, Application US/10751736
; Sequence 21929, Application US/10751736
; Publication No. US20040265230A1
; GENERAL INFORMATION:
; APPLICANT: Watch
; APPLICANT: Martinez, Robert
; APPLICANT: Brown, Eugene
; APPLICANT: Liu, Wei
; TITLE OF INVENTION: COMPOSITIONS AND METHODS FOR DIAGNOSING AND TREATING COLON
; TITLE OF INVENTION: CANCENT
; TITLE OF INVENTION CANCENT
; TITLE OF INVENTION: CANCENT
; TITLE OF INVENTION TOWER: US/10/751,736
; CURRENT APPLICATION NUMBER: US/10/751,736
; CURRENT PILING DATE: 2003-01-06
; PRIOR FILING DATE: 2003-01-06
; NUMBER OF SEQ ID NOS: 54873
; SEQ ID NO 21929
; LENTH:: 21
; EMOTH:: 21
                                                                                                                                 Sequence 21281, Application US/10751736
; Sequence 21281, Application US/10751736
; Publication No. US20040265230A1
; GENERAL INFORMATION:
; APPLICANT: Wath
; APPLICANT: Brown, Eugene
; APPLICANT: Liu, Wei
; TITLE OF INVENTION: COMPOSITIONS AND METHODS FOR DIAGNOSING AND TREATING COLON
; TITLE OF INVENTION: CANCENT
; TITLE OF INVENTION: CANCENT
; TITLE OF INVENTION: UNMBER: US/10/751,736
; CURRENT APPLICATION NUMBER: US/10/751,736
; CURRENT PILING DATE: 2003-01-06
; PRIOR FILING DATE: 2003-01-06
; PRIOR FILING DATE: 2003-01-06
; NUMBER OF SEQ ID NOS: 54473
; SEQ ID NO 21281
; LEMOTH: 21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    h Similarity 73.7%; Pred. No. 5.5e+02; 14; Conservative 3; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Query Match 0.3%; Score 15.8; DB 1; Length 21; Best Local Similarity 73.7%; Pred. No. 5.5e+02; Matches 14; Conservative 3; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1097 AAGACAACCCGGCAGATTT 1115
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1097 AAGACAACCCGCCAGATTT 1115
2917 GAAGACAAACTTCTGGCAC 2935
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              3 AAGACAUACCGGCAGAUUU 21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     3 AAGACAUACCGGCAGAUUU 21
                                             21 GAAGAACACTTCTGGCAC 3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  14; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      , ORGANISM: RNAi
US-10-751-736-21929
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        , ORGANISM: RNAi
US-10-751-736-21281
                                                                                                                              RESULT 662
US-10-751-736-21281
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Query Match
Best Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TYPE: RNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 RESULT 664
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        d
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ð
                                           셤
                                                                                                                                                                                                                                                                                                                    Sequence 13970/c
; Sequence 13970, Application US/10751736
; GENERAL INFORMATION:
GENERAL INFORMATION:
APPLICANT: Watch
APPLICANT: Brown, Eugene
TITLE OF INVENTION: CAMPOSITIONS AND METHODS FOR DIAGNOSING AND TREATING COLON
TITLE OF INVENTION: CANCENS
TITLE OF INVENTION: CANCENS
TITLE OF INVENTION: CANCENS
FILE REPERBNCE: AM100927 (031896-002000)
CURRENT FILING DATE: 2003-01-06
PRIOR APPLICATION NUMBER: US/10/751,736
CURRENT FILING DATE: 2003-01-06
PRIOR FILING DATE: 2003-01-06
NUMBER OF SEQ ID NOS: 54873
SOFTWARE: Patentin version 3.2
SEQ ID NO 13970
LENGTH: 21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            RESULT 661

US-10-751-736-18927/c

i Sequence 18927, Application US/10751736

j Publication No. US20040265230A1

i GENERAL INFORMATION:

APPLICANT: Myeth

APPLICANT: Martinez, Robert

APPLICANT: Martinez, Robert

APPLICANT: More Brown, Eugene

APPLICANT: Liu, Wei

TITLE OF INVENTION: CANCERS

TITLE OF INVENTION: CANCERS

TITLE PERFERENCE: AM100927 (031896-002000)

CURRENT APPLICATION NUMBER: US/10/751,736

CURRENT APPLICATION NUMBER: US/10/751,736

CURRENT FILING DATE: 2003-01-06

NUMBER OF SEQ ID NOS: 54873

SOFTWARE: PatentIn version 3.2

LIENGTH: 21

LIENGTH: 21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ö
                                                                                                                                    ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Gaps
                                                                                                                                       Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ö
                                                                                                                                    ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    0.3%; Score 15.8; DB 1; Length 21; 89.5%; Pred. No. 5.5e+02; tive 0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           0.3%; Score 15.8; DB 1; Length 21;
89.5%; Pred. No. 5.5e+02;
tive 0; Mismatches 2; Indels
                                                                              Ouery Match 0.3%; Score 15.8; DB 1; Length 21; Best Local Similarity 68.4%; Pred. No. 5.5e+02; Matches 13; Conservative 4; Mismatches 2; Indels
                                                                                                                                                                                          2871 ACAGCTTCTGAAGAGTTG 2889
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  949 ATTGCTTTCCAGATCCTGA 967
                                                                                                                                                                                                                        3 ACAGUUGCUGAAGAAGUUG 21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        20 ATTGCTTTCCTGATCATGA 2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Query Match 0.3
Best Local Similarity 89.5
Matches 17; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Matches 17; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ; TYPE: RNA
; ORGANISM: RNAi
US-10-751-736-18927
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           us-10-751-736-13970
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TYPE: RNA
ORGANISM: RNAi
             , ORGANISM: RNAi
US-10-751-736-7896
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          8
                                                                                                                                                                                                                                             셤
                                                                                                                                                                                                  ð
```

gibbs-10-667-022-4.rnpb

```
TYPE: DNA
CORGANISM: homo sapiens
US-10-751-736-44650
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TYPE: DNA ORGANISM: homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          US-10-847-918-3467/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      US-10-751-736-48472
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                   ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ò
                                                                                                         APPLICANT: Brown, Eugene APPLICANT: Brown, Eugene APPLICANT: Brown, Eugene TITLE OF INVENTION: COMPOSITIONS AND METHODS FOR DIAGNOSING AND TREATING COLON TITLE OF INVENTION: CANCERS FILE REPERBENCE: AM100927 (031896-002000) CURRENT APPLICATION NUMBER: US/10/751,736 CURRENT FILING DATE: 2003-01-06 PRIOR PAPLICATION NUMBER: US Provisional Application 60/438,000 PRIOR PILING DATE: 2003-01-06 NUMBER OF SEQ ID NOS: 54873 SEQ ID NOS: 54873 SEQ ID NO 23285 LENGTH: 21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     APPLICANT: Marrinez, Robert
APPLICANT: Brown, Eugene
APPLICANT: Liu, Wei
TITLE OF INVENTION: COMPOSITIONS AND METHODS FOR DIAGNOSING AND TREATING COLON
TITLE OF INVENTION: COMPOSITIONS AND METHODS FOR DIAGNOSING AND TREATING COLON
FILE REFERENCE: AM100927 (21986-002000)
CURRENT APPLICATION NUMBER: US/10/751,736
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             PRIOR APPLICATION NUMBER: 2003-01-06
PRIOR PLICATION NUMBER: US Provisional Application 60/438,000
NUMBER OF SEQ ID NOS: 54873
SOFTWARE: Patentin version 3.2
SEQ ID NO 36664
TENOTH: 21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  0.3%; Score 15.8; DB 1; Length 21;
88.4%; Pred. No. 5.5e+02;
ve 4; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        0.3%; Score 15.8; DB 1; Length 21;
89.5%; Pred. No. 5.5e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  0, Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      RESULT 666
US-10-751-736-44650/c
US-10-751-736-44650, Application US/10751736
; Publication No. US20040265230A1
; GENERAL INFORMATION:
; APPLICANT: Wyeth
Sequence 23285, Application US/10751736
Publication No. US20040265230A1
GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ; Sequence 36664, Application US/10751736; Publication No. US20040265230A1 GENERAL INFORMATION: APPLICANT: Wyeth
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           4308 TAGTCCTGCAGATGGAAAT 4326
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               803 ATTCTGCACAGAATTGTCT 821
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     2 UAUUCCAGCAGAUGGAAAU 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       20 Arretreacadearrerer 2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       68.4%;
                                                                 APPLICANT: Wyeth APPLICANT: Martinez, Robert
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   APPLICANT: Martinez, Robert APPLICANT: Brown, Eugene
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Query Match 0.39
Best Local Similarity 68.4°
Matches 13, Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Query Match 0.3
Best Local Similarity 89.5
Matches 17; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ; ORGANISM: homo sapiens
US-10-751-736-36664
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       RESULT 665
US-10-751-736-36664/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                      US-10-751-736-23285
                                                                                                                                                                                                                                                                                                                                                                                                           TYPE: RNA
ORGANISM: RNAi
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TYPE: DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ઠે
```

```
TITLE OF INVENTION: COMPOSITIONS AND NETHODS FOR DIAGNOSING AND FREATING COLON
FILLE OF INVENTION: COMPOSITIONS AND NETHODS FOR DIAGNOSING AND FREATING COLON
FILLE PREPARACE: ANIO922 (011956-002000)
FILLE PREPARACE: ANIO922 (011956-002000)
FILLE PREPARACE: ANIO922 (011956-002000)
FILLE PRICE FILLE OF THE PROPERTY OF THE PROPETTY OF THE PROPETTY OF THE PROPETTY OF THE PROPETTY OF
```

```
US-09-780-533A-963/C

US-09-780-533A-963/C

Sequence 963, Application US/09780533A

Publication No. US20030060611A1

GENERAL INFORMATION:
APPLICANT: Ribozyme Pharmaceuticals, Inc.
APPLICANT: Blatt, Larry
APPLICANT: Chowrira, Bharat
APPLICANT: Chowrira, Bharat
APPLICANT: Habberli, Pete
TILLE REFERENCE: MBHB00,878-A (400/011)
FILE REFERENCE: MBHB00,878-A (400/011)
CURRENT APPLICATION: Wethod and Reagent for the Inhibition of NOGO Gene
FILE REFERENCE: MBHB00,878-A (400/011)
FURNEY FILING DATE: 2010-02-09
PRIOR APPLICATION NUMBER: US 60/181,797
PRIOR FILING DATE: 2000-02-11
NUMBER OF SEQ ID NOS: 6679
SOFTWARE: PatentIn version 3.0
SEQ ID NO 963
FERENCE: PatentIn version 3.0
                                                                                                                                                                  RESULT 671
US-09-780-533A-962/C
US-09-780-533A-962/C
Sequence 962, Application US/09780533A
Publication No. US20030060611A1
SEGNERAL INFORMATION:
APPLICANT: Ribozyme Pharmaceuticals, Inc.
APPLICANT: Blatt, Larry
APPLICANT: Chowrira, Bharat
APPLICANT: Hacberli, Pete
TITLE OF INVENTION: Method and Reagent for the Inhibition of NOGO Gene
FILE REFERENCE: MEHBOO, 878-A (400/011)
CURRENT FILING DATE: 2000-02-09
PRIOR PILING DATE: 2000-02-11
NUMBER OF SEQ ID NOS: 6679
SOFTWARE: Patentin version 3.0
SEQ ID NO 962
LENGTH: 17
                                                                   Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ö
                                                                   ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              0.3%; Score 15.4; DB 1; Length 17; llarity 94.1%; Pred. No. 5e+02; Conservative 0; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             0.3%; Score 15.4; DB 1; Length 17; ilarity 94.1%; Pred. No. 5e+02; Conservative 0; Mismatches 1. Tagal
                        0.3%; Score 15.4; DB 1; Length 17; 94.1%; Pred. No. 5e+02; ive 0; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1578 TTCTGCAGATGAGCGTA 1594
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1579 TCTGCAGATGAGCGTAT 1595
                                                                                                             1577 TTTCTGCAGATGAGCGT 1593
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           rcrecagagagactrar 1
                                                                                                                                                  17 Tricrecadadecer 1
                                  Query Match 0.3
Best Local Similarity 94.1
Matches 16; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ORGANISM: Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TYPE: RNA
ORGANISM: Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Query Match
Best Local Similarity
Matches 16; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Best_Local Similarity
Matches 16; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     US-09-780-533A-963
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              US-09-780-533A-962
US-09-780-533A-63
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TYPE: RNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ð
                                                                                                                                                    g
                                                                                                                    ઠે
                                                                                                                                                                                                                                                                                                                                                                          ö
                                                                                                                                                                                                                   ő
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Sequence 63, Application US/09780533A
| Sequence 63, Application US20030060611A1
| Publication No. US20030060611A1
| GENERAL INFORMATION:
| APPLICANT: Ribozyme Pharmaceuticals, Inc.
| APPLICANT: Blatt, Larry
| APPLICANT: Chowrife, Bharat
| APPLICANT: Habberl, Pete
| TITLE OF INVENTION: Method and Reagent for the Inhibition of NOGO Gene
| TITLE REFERENCE: MBHBO0, 878-A (400/011)
| FILE REFERENCE: MBHBO0, 878-A (400/011)
| CURRENT APPLICATION NUMBER: US 60/181,797
| PRIOR FILING DATE: 2001-02-10
| NUMBER OF SEQ ID NOS: 6679
| SOFTWARE: PatentIn version 3.0
| LENGTH: 17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Gaps
                                                                                                                                                                                                                     Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ;
0
                                                                                                                                                                                                                     ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Query Match 0.3%; Score 15.8; DB 1; Length 21; Best Local Similarity 89.5%; Pred. No. 5.5e+02; Matches 17; Conservative 0; Mismatches 2; Indels
                                                                                                                                                                           Score 15.8; DB 1; Length 21;
Pred. No. 5.5e+02;
0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       3919 AATGGCTCTCTGGTTGGCT 3937
                                                                                                                                                                                                                                                            3919 AATGGCTCTCTGGTTGGCT 3937
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AArescrarcresireacr 3
                                                                                                                                                                                                                                                                                                 AATGGCTATCTGGTTGACT 3
    PRIOR FILING DATE: 2003-05-20
NUMBER OF SEQ ID NOS: 14937
SOFTWARE: Patentin version 3.2
SEQ ID NO 3467
LENGTH: 21
                                                                                                                                                                                 Query Match 0.3%;
Best Local Similarity 89.5%;
Matches 17; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TYPE: RNA ORGANISM: RNAi-sense strand
                                                                                                         TYPE: RNA
CRGANISM: RNAi-sense strand
US-10-847-918-3467
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ORGANISM: Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         RESULT 670
US-09-780-533A-63/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         US-10-847-918-5165
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TYPE: RNA
                                                                                                                                                                                                                                                                                                   21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                셤
                                                                                                                                                                                                                                                                  ઠ
                                                                                                                                                                                                                                                                                                 셤
```

ö

ö

Gaps

```
INFORMATION FOR SEQ ID NO: SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       FILING DATE:
                                                                                                                                                                                                                                                                                                                           TOPOLOGY:
                                                                                                                                                                                                                                                                                                                                             US-09-752-639-98
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         US-09-984-198-98
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Sequence 98, Application US/09752639
Patent No. US200201243A1
GENERAL INFORMATION:
GENERAL INFORMATION:
APPLICANT: Granger, G.A.
TITLE OF INVENTION: Factor Receptor Releasing Enzyme Activity, and Methods TITLE OF INVENTION: of Use Thereof
NUMBER OF SEQUENCES: 154
CORRESPONDENCE ADDRESS:
ADDRESSEE: MORRISON & FOERSTER
STRET: 755 PAGE MILL ROAD
CITY: Palo Alto
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ; LOCATION: 1..18 -
; OTHER INFORMATION: upstream amplification primer 99-28352 for SEQ 151,
US-10-333-429-322
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ö
                                                                                                                  Sequence 322, Application US/1033429
; Publication No. US20040048265A1
; GRNERAL INFORMATION:
GENERAL INFORMATION:
TITLE OF INVENTION:
CURRENT APPLICATION:
CURRENT APPLICATION NUMBER: US/10/333,429
; CURRENT FILING DATE: 2003-01-17
PRIOR APPLICATION NUMBER: PCT/IB01/01477
; PRIOR APPLICATION NUMBER: US 60/219,704
; PRIOR RILING DATE: 2000-07-18
; NUMBER OF SEQ ID NOS: 579
; SEQ ID NO 322
; SEQ ID NO 322
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Query Match 0.3%; Score 15.4; DB 1; Length 18; Best Local Similarity 94.1%; Pred. No. 5.2e+02; Matches 16; Conservative 0; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  COUNTRY: USA
ZIP: 94104-1018
COMPUTER READABLE FORM:
MEDUW TYRE: Diskette
COMPUTER: IBM Compatible
OPERATING SYSTEM: Windows
SOFTWARE: FeatSEQ for windows Version 2.0b
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/752,639
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CLASSIFICATION:
PRIOR APPLICATION DATA:
APPLICATION NUMBER: PCT/US99/10793
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      FILING DATE: 08/964,747 APPLICATION NUMBER: 08/964,747 FILING DATE: 05-NOV-1997
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              FILING DATE: APPLICATION NUMBER: 09/081,385
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  4144 CACCCTCTGTATCAGTC 4160
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CACCCTTTGTATCAGTC 18
17 TTCTGCAGAGGAGCGTA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ORGANISM: Homo Sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    NAME/KEY: primer_bind LOCATION: 1..18
                                                                                                         US-10-333-429-322
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        RESULT 674
US-09-752-639-98
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TYPE: DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     FEATURE
                        g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        셤
```

```
Sequence 98, Application US/09984198

Patent No. US20020106679A1

GENERAL INFORMATION:
GENERAL INFORMATION:
APPLICANT: Gatanaga, T.
APPLICANT: Granger, G.A.
TITLE OF INVENTION: Factor Receptor Releasing Enzyme Activity, and Methods
TITLE OF INVENTION: of Use Thereof
NUMBER OF SEQUENCES: 154
CORRESPONDENCES: 154
CORRESPONDENCES:
ADDRESSEE:

                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Query Match 0.3%; Score 15.4; DB 1; Length 20; Best Local Similarity 94.1%; Pred. No. 5.7e+02; Matches 16; Conservative 0; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 SOFTWARE: FastSEQ for Windows Version 2.0b CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/984,198
                                                                                                                                                                            REGISTRATION NUMBER: 41,386
REFERENCE/DOCKET NUMBER: 22000-20577.21
TELECOMMUNICATION INFORMATION:
TELEPHONE: 650-493-5600
TELEFAX: 650-494-0792
TELER: 706141
INFORMATION FOR SEQ ID NO: 98:
SEQUENCE CHARACTERISTICS:
LENGTH: 20 base pairs
TYPE: nucleic acid
STRANDEDNESS: single
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     PRIOR APPLICATION DATA:
APPLICATION NUMBER: PCT/US99/10793
FILING DATE:
APPLICATION NUMBER: 09/081,385
FILING DATE: 05-NOV-1997
PILING DATE: 05-NOV-1997
APPLICATION NUMBER: 60/030,761
FILING DATE: 06-NOV-1996
ATTORNEY/AGENT INFORMATION:
APPLICATION NUMBER: 60/030,761
FILING DATE: 06-NOV-1996
ATTORNEY/AGENT INFORMATION:
NAME: Wu, Frank
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       NAME: Wu, Frank
REGISTRATION NUMBER: 41,386
REFERENCE/DOCKET NUMBER: 2200
TELECOMMUNICATION INFORMATION:
TELEPHONE: 650-813-5600
TELEFAX: 650-494-0792
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   4586 CCACACAGGGCTTCATC 4602
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               2 ccacagagggcricarc 18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          98:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                COMPUTER: IBM Compatible OPERATING SYSTEM: Window
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             STATE: CA
COUNTRY: USA
ZIP: 94304-1018
COMPUTER READABLE FORM:
MEDIUM TYPE: Diskette
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Diskette
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CLASSIFICATION:
```

```
FEATURE:
OTHER INFORMATION: Synthetic construct
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             US-10-309-362-65
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ö
                                                                                                                                                                                  ö
                                                                                                                                                                                                                                                                                                                                        RESULT 676
US-10-238-443-65/C
US-10-238-443-65/C
Sequence 65, Application US/10238443
Sequence 65, Application US/10238443
Sequence 65, Application US/20030083302A1
SEMERAL INFORMATION:
APPLICANT: Donna T. Watt
TITLE OF INVENTION: ANTISENSE MODULATION OF RECQL5 EXPRESSION
FILE REFERENCE: RTS-0203
CURRENT APPLICATION NUMBER: US/10/238,443
CURRENT FILING DATE: 2002-09-09
PRIOR PILING DATE: 2001-03-01
SROUB RO FSEQ ID NOS: 92
LENGTH: 20
LENGTH: 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ö
                                                                                                                                                                                  ö
                                                                                                                                 Query Match

0.3%; Score 15.4; DB 1; Length 20;
Best Local Similarity 94.1%; Pred. No. 5.7e+02;
Matches 16; Conservative 0; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ch 0.3%; Score 15.4; DB 1; Length 20; 1 Similarity 94.1%; Pred. No. 5.7e+02; 16; Conservative 0; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     APPLICANT: Nailsen, Peter
APPLICANT: Buchardt, Ole
APPLICANT: Buchardt, Ole
APPLICANT: Dueholm, Kim L.
APPLICANT: Christensen, Leif
APPLICANT: Coull, James M.
APPLICANT: Griffith, Michael
TITLE OF INVENTION: Linked Peptide Nucleic Acids
FILLE REFERENCE: ISISSO42
CURRENT APPLICANTON NUMBER: US/10/188,404
CURRENT FILING DATE: 1994-07-15
PRIOR FILING DATE: 1994-07-15
PRIOR FILING DATE: 1997-04-23
NUMBER OF SEQ ID NOS: 69
SOFTWARE: Patentin version 3.1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    , OTHER INFORMATION: Antisense Oligonucleotide US-10-238-443-65
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Sequence 49, Application US/10188404
Publication No. US20030105286Al
GENERAL INFORMATION:
APPLICANT: Egholm, Michael
                                                                                                                                                                                                                                 4586 CCACACAGGGCTTCATC 4602
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               844 AAAGCATCTGAGAAAGC 860
                                                                                                                                                                                                                                                                  2 CCACAGAGGGCTTCATC 18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TYPE: DNA
ORGANISM: Artificial Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TYPE: DNA ORGANISM: Artificial Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      20 AAAGCATCTGATAAAGC
           LENGIH: 20 base pairs
                                TYPE: nucleic acid

STRANDEDNESS: single

1 TOPOLOGY: linear

US-09-984-198-98
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Query Match
Best Local Similarity
Matches 16; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                -10-188-404-49/C
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           엄
```

```
ö
                                                                                                                                                                                                                                                                                                                                                                                                        ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Gaps
                                                                                                                                                                                                                                                                                                                                                                                                           Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                US-10-260-451-6

Sequence 6, Application US/10260451

Sequence 6, Application Wolfold State Sequence 6, Application No. US20030124096A1

GENERAL INFORMATION:
APPLICANT: LOCARNINI, STEPHEN A
APPLICANT: BARTHOLOMEUSZ, ANGELINE I
APPLICANT: DEMAN, ROBERT A
TITLE OF INVENTION: VIRAL VARIANTS AND METHODS FOR DETECTING SAME
TITLE OF INVENTION WOBERT OF 11 TILE OF INVENTION NUMBER: US/10/260,451
CURRENT APPLICATION NUMBER: US/09/306,420

PRIOR APPLICATION NUMBER: PCT/AU97/00520
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  US-10-309-362-65/c
| US-10-309-362-65/c
| Sequence 65, Application US/10309362
| Sequence 65, Application US/10309362
| Publication No. US20030114412Al
| GENERAL INFORMATION:
| APPLICANT: Donna T. Ward
| APPLICANT: Donna T. Watc
| TITLE OF INVENTION: ANITSENSE MODULATION OF RECQL5 EXPRESSION
| TITLE OF INVENTION: ANITSENSE MODULATION OF RECQL5 EXPRESSION
| FILE REFERENCE: RY5-0203
| CURRENT PILING DATE: 2002-12-03
| CURRENT PILING DATE: 2002-12-03
| PRIOR FILING DATE: 2001-03-01
| NUMBER OF SEQ ID NOS: 92
| SEQ ID NO 65
| LENGTH: 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         .;
0
                                                                                                                                                                                                                                                                                                                                                                                                           ;
0
                                                                                                                                                                                                                                                                                                                                                          Length 20;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Indels
                                                                                                                                                                                                                                                                                                                                                                                                           Indels
NAME/KEY: misc feature
LOCATION: (10)...(11)
OTHER INFORMATION: Ethylene Glycol, Ethylene Glycol,
OTHER INFORMATION: Ethylene Glycol Linkage
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Query Match
0.3%; Score 15.4; DB 1;
Best Local Similarity 94.1%; Pred. No. 5.7e+02;
Matches 16; Conservative 0; Mismatches 1;
                                                                                                                                                                                                                                                                                                                                                        Score 15.4; DB 1;
Pred. No. 5.7e+02;
0; Mismatches 2;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             OTHER INFORMATION: Antisense Oligonucleotide
                                                                                                        FEATURE:
NAME/KEY: misc_feature
LOCATION: (13) ... (13)
COTHER INFORMATION: N is Pseudoiscytosine
FEATURE:
NAME/KEY: misc_feature
LOCATION: (20) ... (20)
COTHER INFORMATION: N is Pseudoiscytosine
US-10-188-404-49
                                                                                                                                                                                                                                                                                                                                                                                                                                                                5025 AAAAAAAAAAAAAA 5042
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               844 AAAGCATCTGAGAAAGC 860
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TYPE: DNA ORGANISM: Artificial Sequence
                                                                                                                                                                                                                                                                                                                                                             Query Match 0.3%;
Best Local Similarity 88.9%;
Matches 16; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 19 AAAAAANAAAAGAAAAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    20 AAAGCATCTGATAAAGC
```

g

δ

```
ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ô
                                           FEATURE:

NAME/KEY: primer_bind

LOCATION: 1..20

OTHER INFORMATION: upstream amplification primer 99-10046 for SEQ 2266, US-10-349-143-6200
                                                                                                                                                                                                                                                                                                                                                          Gape
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Gape
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ; OTHER INFORMATION: Description of Artificial Sequence: PCR primer US-10-620-532-9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ..
0
                                                                                                                                                                                                                                                                                                                                                      ö
                                                                                                                                                                                                                                                                   Query Match 0.3%; Score 15.4; DB 1; Length 20; Best Local Similarity 94.1%; Pred. No. 5.7e+02; Matches 16; Conservative 0; Mismatches 1; Indel8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Query Match
0.3%; Score 15.4; DB 1; Length 20;
Best Local Similarity 94.1%; Pred. No. 5.7e+02;
Matches 16; Conservative 0; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Sequence 9, Application US/10620532;
Publication No. US20040086916A1
GENERAL INFORMATION:
APPLICANT: Granham, Peggy J.;
APPLICANT: Graveel, Carrie R.;
TITLE OF INVENTION: Liver Tunor marker Sequences;
TITLE OF INVENTION: Liver Tunor marker Sequences;
FILE REFERENCE: 960296.98750
CURRENT APPLICATION NUMBER: US/10/620,532
CURRENT FILING DATE: 2003-07-16;
PRIOR APPLICATION NUMBER: 60/396,626
PRIOR APPLICATION NUMBER: 60/396,626
PRIOR APPLICATION NUMBER: 2003-07-17
NUMBER OF SEQ ID NOS: 12
SOFTWARE: Patentin Ver. 2.1
SEQ ID NO 9
LENGTH: 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Sequence 156, Application US/10481613

Publication No. US20050085627A1

GENERAL INFORMATION:

APPLICANT: Moffatt, Miriam

APPLICANT: Tinang, Youming

APPLICANT: Tinaley, Jon

TITLE OF INVENTION: Acopy

FILE REPRENCE: 16721-0003US1 / P32688WO/KVC

CURRENT APPLICATION NUMBER: US/10/481,613

CURRENT FILING DATE: 2003-12-19

PRIOR APPLICATION NUMBER: PCT/GB02/02859

PRIOR APPLICATION NUMBER: GB 0115211.5

PRIOR PELING DATE: 2001-06-21

PRIOR FILING DATE: 2001-06-21

SOFTWARE: PALENTING DATE: 2001-06-31

SOFTWARE: PALENTING DATE: 2001-06-31
                                                                                                                                                                                                                                                                                                                                                                                                                            4356 GAAAATAAGGTTTTGGG 4372
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        3890 CACAGICIGITCIIGCC 3906
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   17 GAAAATAATGTTTTGGG 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              20 cccacrcrcrrcrrccc 4
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ORGANISM: Artificial Sequence
           ORGANISM: Homo Sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        JS-10-481-613-156/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         JS-10-620-532-9/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TYPE: DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    RESULT 683
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   셤
                                                                                                                                                                                                                                                                                                                                                                                                                                ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          US-10-008-789-12
Sequence 12, Application US/10008789
Sequence 12, Application US/10008789
Sequence 12, Application US/10008781
Sequence 12, Application US/100030125276A1
GENERAL INFORMATION:
APPLICANT: C. Frank Bennett
APPLICANT: Kenneth Dobie
TITLE OF INVENTION: ANTISENSE MODULATION OF THYROID HORMONE RECEPTOR INTERACTOR 6 EXEFTER REPRENCE: RTS-0333
CURRENT APPLICATION NUMBER: US/10/008,789
CURRENT FILING DATE: 2001-11-08
NUMBER OF SEQ ID NOS: 89
SEQ ID NO 12
LENGTH: 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ## SEPLOANT: US OF APPLICATION US/10349143

## SEQUENCE 6200, Application US/10349143

## Publication No. US20040005584A1

## SEDERAL INFORMATION:

## APPLICANT: Chen. Daniel

## APPLICANT: Chumakov, Ilya

## APPLICANT: Chumakov, Ilya

## APPLICANT: Chumakov, Ilya

## TILE OF INVENTION: Biallelic markers for use in constructing a high density...

## PRIOR APPLICATION NUMBER: US/10/349,143

## CURRENT FILING DATE: 1099-10-20

## PRIOR APPLICATION NUMBER: US/09/422,978

## PRIOR APPLICATION NUMBER: EARLIER APPLICATION NUMBER: US 09/298,850

## PRIOR APPLICATION NUMBER: EARLIER PILING DATE: 1999-04-21

## PRIOR PILING DATE: EARLIER FILING DATE: 1998-04-21

## PRIOR PILING DATE: EARLIER FILING DATE: 1998-04-21

## PRIOR FILING DATE: EARLIER FILING DATE: 1998-04-21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 0; Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ö
                                                                                                                                                                                                                                                                                                                                                                                                                     Score 15.4; DB 1; Length 20;
Pred. No. 5.7e+02;
0; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Query Match 0.3%; Score 15.4; DB 1; Length 20; Best Local Similarity 94.1%; Pred. No. 5.7e+02; Matches 16; Conservative 0; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ; FEATURE:
-1 OTHER INFORMATION: Antisense Oligonucleotide
US-10-008-789-12
PRIOR FILING DATE: 1997-08-15
PRIOR APPLICATION NUMBER: P03519
PRIOR FILING DATE: 1996-11-08
NUMBER OF SEQ ID NOS: 57
SOFTWARE: Patentin Ver: 2.0
SEQ ID NO 6
LENGTH: 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        2699 AAAGAAACTTGTTCTG 2715
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      525 TTATATCCTAACCTTAC 541
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     3 TTCTATCCTAACCTTAC 19
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              2 AAAGAAACTTTTTCTG 18
                                                                                                                                                                                                                                                                                                                                                                                                                            0.3%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TYPE: DNA . ORGANISM: Artificial Sequence
                                                                                                                                                                                                                                                                   ; TYPE: DNA
; ORGANISM: Hepatitis B virus
US-10-260-451-6
                                                                                                                                                                                                                                                                                                                                                                                                             Query Match 0.3°
Best Local Similarity 94.1°
Matches 16; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TYPE: DNA
```

셤

ઠે

g ð

```
APPLICANT: Gatanaga, T.
APPLICANT: Granger, G.A.
TITLE OF INVENTION: Factors Altering Tumor Necrosis
TITLE OF INVENTION: Factor Receptor Releasing Enzyme Activity, and Methods
of Use Thereof
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           COMPUTER READABLE FORM:
MEDIUM TYPE: Diskette
COMPUTER: IBM Compatible
OPERATING SYSTEM: Windows
SOFTWARE: FastSEQ for Windows Version 2.0b
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       0.3%; Score 15.4; DB 1;
94.1%; Pred. No. 5.7e+02;
Live 0; Mismatches 1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ATTORNEY/AGENT INFORMATION:
NAME: Wu, Frank
REGISTRATION NUMBER: 41,386
REGISTRATION NUMBER: 22000-20577.21
TELECOMMUNICATION INFORMATION:
TELEPHONE: 650-813-5600
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/11/011,500
PILING DATE: 13-Dec-2004
CLASSIPICATION: «Unknown»
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US/10/967,092
FILING DATE: 15-Oct-2004
APPLICATION NUMBER: US/09/112,813
FILING DATE: 13-Nov-2000
APPLICATION NUMBER: US/09/091,385
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       SEQUENCE DESCRIPTION: SEQ ID NO: 98:
US-11-011-500-98
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              FILING DATE: «Unknown»
APPLICATION NUMBER: 08/964,747
FILING DATE: 05-NOV-1997
APPLICATION NUMBER: 60/030,761
FILING DATE: 06-NOV-1996
                                                                                                                                                                                                                                                                                                                  NUMBER OF SEQUENCES: 154
CORRESPONDENCE ADDRESS:
ADDRESSEE: MORRISON & FOERSTER
STREET: 755 PAGE MILL ROAD
CITY: PALO Alto
STATE: CA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                RESULT 686
US-10-872-645-29/C
Sequence 29, Application US/10872645
; Publication No. US20050100887A1
                                                                                                                                US-11-011-500-98
; Sequence 98, Application US/11011500
; Publication No. US20050158826A1
; GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   4586 CCACACAGGGCTTCATC 4602
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                LENGTH: 20 base pairs
4586 CCACACAGGGCTTCATC 4602
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TELEFAX: 650-494-0792
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ccacagadedcricarc 18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TELEX: 706141
INFORMATION FOR SEQ ID NO: 98:
SEQUENCE CHARACTERISTICS:
                           TOPOLOGY: linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            16; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                              COUNTRY: USA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Matches
                                                                                                                RESULT 685
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                셤
           ઠે
                                           g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                Ab Information:
APPLICANT: Gatanaga, T.
Granger, G.A.
TITLE OF INVENTION: Factors Altering Tumor Necrosis
Factor Receptor Releasing Enzyme Activity, and Methods
of Use Thereof
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ö
                                                                                                                                                                                                         ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ö
                                                                                                                                                                                                           ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Query Match 0.3%; Score 15.4; DB 1; Length 20; Best Local Similarity 94.1%; Pred. No. 5.7e+02; Matches 16; Conservative 0; Mismatches 1; Indels
                                                                                                                                                                  Length 20;
                                                                                                                                                                                                         1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              COUNTER READABLE FORM:

MEDIUM TYRE: Diskette

MEDIUM TYRE: Diskette

COMPUTER: IBM Compatible

COMPUTER: IEM Compatible

OPERATING SYSTEM: Windows Version 2.0b

CURRENT APPLICATION DATA:

APPLICATION NUMBER: US/10/967,092

FILING DATE: 15-Oct-2004

CLASSIFICATION DATA:

APPLICATION DATA:

APPLICATION DATA:

APPLICATION DATA:

APPLICATION NUMBER: US/09/712,813

FILING DATE: 13-Nov-2000

APPLICATION NUMBER: 08/964,747

FILING DATE: 0-UNKNOMD-

APPLICATION NUMBER: 08/964,747

FILING DATE: 0-NOV-1997

APPLICATION NUMBER: 06/030,761

FILING DATE: 0-NOV-1996

APPLICATION NUMBER: 06-NOV-1996

APPLICATION NUMBER: 06-NOV-1996

APPLICATION NUMBER: 06-NOV-1996

ATTORNEY AGENT INFORMATION:

NAME: WW. FRANK
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                REGISTRATION NUMBER: 41,386
REFERENCE/DOCKET NUMBER: 22000-20577.21
                                                                                                                                                             Score 15.4; DB 1;
Pred. No. 5.7e+02;
0; Mismatches 1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              NUMBER OF SEQUENCES: 154
CORRESPONDENCE ADDRESS:
ADDRESSEE: MORRISON & FOERSTER
STREET: 755 PAGE MILL ROAD
CITY: Palo Alto
STATE: CA
COUNTRY: USA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TOPOLOGY: hinear sequence DESCRIPTION: SEQ ID NO: 98: US-10-967-092-98
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TELECOMMUNICATION INFORMATION:
TELEPHONE: 650-813-5600
TELEFAX: 650-494-0792
                                                                                                                                                                                                                                                                                                                                                                                           US-10-967-092-98
; Sequence 98, Application US/10967092
; Publication No. US20050090647A1
; GENERAL INFORMATION:
                                                                                                                                                                                                                                                         2636 ATGTCTACTGTAAACTG 2652
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TELEX: 706141
INFORMATION FOR SEQ ID NO: 98:
SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                  17 ATGTCTACTGTAAACAG 1
                                                                                                                                                                      0.3%;
                                           TYPE: DNA
ORGANISM: Artificial sequence
                                                                                                                                                                         Query Match 0.3
Best Local Similarity 94.1
Matches 16; Conservative
                                                                                                      CTHER INFORMATION: Primer US-10-481-613-156
                      LENGTH: 20
                                                                                  FEATURE:
```

```
Sequence 127, Application US/10160786
Publication No. US20030225013A1
GENERAL INFORMATION:
GENERAL INFORMATION:
GENERAL INFORMATION:
APPLICANT: Kenneth W. Dobie
TITLE OF INVENTION: ANTISENSE MODULATION OF PHOSPHOINOSITIDE-3-KINASE, REGULATORY SUBILITLE OF INVENTION: ANTISENSE MODULATION OF PHOSPHOINOSITIDE-3-KINASE, REGULATORY SUBILITLE OF INVENTION: P150 EXPRESSION
FILE REFERENCE: RTS-0376
CURRENT APPLICATION NUMBER: US/10/160,786
CURRENT PILING DATE: 2002-05-31
NUMBER OF SEQ ID NOS: 147
SEQ ID NO 127
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Sequence 59, Application US/10667022
Publication No. US20040063657A1
GENERAL INFORMATION:
APPLICANT: Susan M. Freier
APPLICANT: Kenneth W. Dobie
TITLE OF INVENTION: P150 EXPRESSION
FILE REFERENCE: RTS-0376
CURRENT APPLICATION NUMBER: US/10/667,022
CURRENT FILING DATE: 2003-09-18
SEQ ID NOS: 147
LENGTH: 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Sequence 127, Application US/10667022

Sequence 127, Application No. US20040063657A1

Publication No. US20040063657A1

Publication No. US20040063657A1

APPLICANT: Susan M. Freier

APPLICANT: Renneth W. Dobie

TITLE OF INVENTION: ANTISENSE MODULATION OF PHOSPHOINOSITIDE-3-KINASE, REGULATORY SUBI

TITLE OF INVENTION: P150 EXPRESSION

FILE REFERENCE: RTS-0376

CURRENT APPLICATION NUMBER: US/10/667,022

CURRENT APPLICATION NUMBER: 2003-09-18

NUMBER OF SEQ ID NOS: 147

SEQ ID NO 127
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                   0.3%; Score 15.2; DB 1; Length 20;
85.0%; Pred. No. 5.9e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Length 20;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Query Match
0.3%; Score 15.2; DB 1;
Best Local Similarity 85.0%; Pred. No. 5.9e+02;
Matches 17; Conservative 0; Mismatches 3;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ; OTHER INFORMATION: AntiBense Oligonucleotide US-10-667-022-59
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       3319 AAACCAGTAATACCGGTTTT 3338
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    3319 AAACCAGTAATACCGGTTTT 3338
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1 AAACCGGTATTACTGGTTTT 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ORGANISM: Artificial Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Best Local Similarity 85.0 Matches 17; Conservative
                                                                                                                                                                                                                                                                                                                           TYPE: DNA
ORGANISM: H. sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   US-10-667-022-127/c
                                                                                                                                                                                                                                                                                                                                                                                                     US-10-160-786-127
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             RESULT 689
US-10-667-022-59
                                                                                                                                                                                                                                                                                                                                                                                                                                                        Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TYPE: DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            RESULT 690
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               RESULT 687

US-10-160-786-59

US-10-160-786-59

Sequence 59, Application US/10160786

Publication No. US20030225013A1

GENERAL INFORMATION:
 APPLICANT: Stanan M. Freier

APPLICANT: Kenneth W. Dobie

TITLE OF INVENTION:
 TITLE OF INVENTION: P150 EXPRESSION

FILE REFERENCE: RTS-0376

CURRENT APPLICATION NUMBER: US/10/160,786

CURRENT PILING DATE: 2002-05-31

NUMBER OF SEQ ID NOS: 147

SEQ ID NOS: 147
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ö
                                        APPLICANT: Gutbrod, Heidrun
APPLICANT: Mueller, Stefan
APPLICANT: Mueller, Stefan
APPLICANT: Mueller, Stefan
APPLICANT: Maeler, Friedrich
Friedrich Fracetzer, Friedrich
TITLE OF INVENTION: Targets for Hepatitis C Virus Infections
TITLE OF INVENTION: Targets for Hepatitis C Virus Infections
TITLE OF INVENTION: Targets for Hepatitis C Virus Infections
FILE REFERENCE: AZM-014.1 US
CURRENT FILING DATE: 2004-06-21
FRIOR PELICATION NUMBER: PCF/EP02/14578
FRIOR FILING DATE: 2002-12-19
FRIOR FILING DATE: 2001-12-21
NUMBER OF SEQ ID NOS: 33
SOFTWARE: Patentin version 3.2
SEQ ID NO 29
LENGTH: 17

WUTHER OF SEQ ID NOS: 33
SEQ ID NO 29
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  0.3%; Score 15.2; DB 1; Length 17; 93.8%; Pred. No. 5.1e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Length 20;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  0.3%; Score 15.2; DB 1;
85.0%; Pred. No. 5.9e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ; OTHER INFORMATION: Antisense Oligonucleotide US-10-160-786-59
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       NAME/KEY: misc feature
LOCATION: (18) . (18)
OTHER INFORMATION: n=a or g or t or c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   3319 AAACCAGTAATACCGGTTTT 3338
  Salassidis, Konstadinos
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1 AAACCGGTATTACTGGTTTT 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 5024 TAAAAAAAAAAAAA 5039
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      NAME/KEY: misc feature
LOCATION: (17)...(17)
OTHER INFORMATION: v = a or g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TYPE: DNA
ORGANISM: Artificial Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  16 BAAAAAAAAAAAA 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Best Local Similarity 93.8
Matches 15; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Query Match 0.3
Best Local Similarity 85.0
Matches 17; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             OTHER INFORMATION: Primer
                                                                                                                                                                                                                                                                                                                                                                                                                                                   TYPE: DNA ORGANISM: Artificial
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    US-10-872-645-29
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ઠે
```

gibbs-10-667-022-4.rnpb

```
Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Best Loca
Matches
                                                                                       ð
                                                                                                                       g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Sequence 177, Application US/09802669
Factor No. US20020004490A1
GENERAL INFORMATION:
APPLICANT: Dean, Nicholas M.
APPLICANT: Dann, Nicholas M.
APPLICANT: Whatt, Jacqueline
APPLICANT: Whatt, Jacqueline
APPLICANT: Stand, Hong
TITLE OF INVERTION: Antisense Compound Modulation of Fas Mediated Signaling
FILE REFERENCE: ISPH-545
CURRENT PELING DATE: 2001-03-09
FRIOR PELING DATE: 2001-03-09
FRIOR PELING DATE: 2000-09-18
FRIOR PELING DATE: 1999-04-12
NUMBER OF SEQ ID NOS: 180
SEQ ID NO 177
LENGTH: 20
                                                                                                                                                                                                                                                                                                                               Sequence 245, Application US/08983605A

Sequence 245, Application Wo. US20020066118A1

GENERAL INFORMATION:

APPLICANT: Roder, Marrion

TITLE OF INVENTION: Microsatellite Markers for Plants of the Species

TITLE OF INVENTION: Said Markers

FILE REFERENCE: 2936.1040 M

CURRENT APPLICATION NUMBER: US/08/983,605A

CURRENT APPLICATION NUMBER: DE 195 25 284.5

EARLIER PILING DATE: 1998-06-28

NUMBER OF SEQ ID NOS: 466

SOFTWARE: PatentIn Ver. 2.0

SEQ ID NO 245

LENGTH: 20
                                                                                                                                                                   ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ö
                                                                                                                                                                   Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Gaps
                                                                                                                                                                ;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Query Match
0.3%; Score 15.2; DB 1; Length 20;
Best Local Similarity 85.0%; Pred. No. 5.9e+02;
Matches 17; Conservative 0; Mismatches 3; Indels
                                                                                                                           Length 20;
                                                                                                                                                              Indels
                                                                                                                       Score 15.2; DB 1;
Pred. No. 5.9e+02;
                                                                                                        0.3%; Scc...
85.0%; Pred. No. 5...
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ; OTHER INFORMATION: Antisense Oligonucleotide US-09-802-669-177
                                                                                                                                                                                                  3319 AAACCAGTAATACCGGTTTT 3338
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            3857 GTGTTGTGGATATGCATCAC 3876
                                                                                                                                                                                                                                          20 AAACCGGTATTACTGGTTTT 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  20 didirdredercrecricae 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TYPE: DNA ORGANISM: Artificial Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ; TYPE: DNA
; ORGANISM: Triticum aestivum
US-08-983-605-245
                                                                                                              Query Match 0.3*
Best Local Similarity 85.0*
Matches 17, Conservative
                    TYPE: DNA
ORGANISM: H. sapiens
FEATURE:
                                                                                                                                                                                                                                                                                                  RESULT 691
US-08-983-605-245/c
                                                              ; FEATURE:
US-10-667-022-127
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             US-09-802-669-177
LENGTH: 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       FEATURE:
                                                                                                                                                                                                  ò
                                                                                                                                                                                                                                        g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                셤
```

```
US-09-817-135B-15

US-09-817-135B-15

Sequence 15, Application US/09817135B

Patent No. US20020123036A1

GENERAL INFORMATION:
APPLICANT: Clavel, Francois
APPLICANT: Clavel, Francois
APPLICANT: Clavel, Francois
APPLICANT: Dam, Elisabeth
APPLICANT: Trouplin, Virginie
APPLICANT: Trouplin, Virginie
APPLICANT: Trouplin, Virginie
TITLE OF INVENITON: Characteristics
FILE REFERENCE: 60240.000002
CURRENT APPLICATION NUMBER: US/09/017,135B
CURRENT APPLICATION NUMBER: ER00/1495
FILOR APPLICATION NUMBER: FR00/1495
FRICK APPLICATION NUMBER: FR00/1495
FRICK APPLICATION NUMBER: FR00/1495
FRICK APPLICATION NUMBER: FR00/1495
FRICK APPLICATION NUMBER: FR00/13970
FRICK APPLICATION NUMBER: FR00/13970
FRICK APPLICATION NUMBER: PR00/13970
FRICK APPLICATION NUMBER
                                                                                                       ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ö
                                                                                                       Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Gaps
                                                                                                       ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           GENERAL INVESTIGE.

APPLICANT: LEX M. COWSETT

APPLICANT: Sacqueline Wyatt

APPLICANT: Gacqueline Wyatt

APPLICANT: Gacqueline Wyatt

APPLICANT: Brett P. Monia

APPLICANT: Madeline M. Butler

APPLICANT: Madeline M. Butler

APPLICANT: Robert McKay

ITILE OF INVENTION: ANTISENSE MODULATION OF PTP1B EXPRESSION

FILE REFERENCE: ISPH-0576

CURRENT APPLICATION NUMBER: US/09/854,883

CURRENT APPLICATION NUMBER: US 09/629,644

PRIOR FILING DATE: 2000-07-31

PRIOR FILING DATE: 2000-07-31

PRIOR FILING DATE: 2000-01-18

NUMBER OF SEQ ID NOS: 389

: LENGTH: 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ö
Query Match 0.3%; Score 15.2; DB 1; Length 20; Best Local Similarity 85.0%; Pred. No. 5.9e+02; Matches 17; Conservative 0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Length 20;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Match 0.3%; Score 15.2; DB 1; Local Similarity 85.0%; Pred. No. 5.9e+02; les 17; Conservative 0; Mismatches 3;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ; OTHER INFORMATION: Antisense Oligonucleotide US-09-854-883-305
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Sequence 305, Application US/09854883
Patent No. US20020055479A1
GENERAL INFORMATION:
                                                                                                                                                                                  3312 AAATAAAAACCAGTAATAC 3331
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         2152 GAGCTCCAAGCCTTACATGA 2171
                                                                                                                                                                                                                                                                       1 AAAGAGAAAACCAGAAATAC 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              20 GGCACCAAGCCTTTCATGA 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TYPE: DNA ORGANISM: Artificial Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TYPE: DNA
ORGANISM: Artificial Sequence
FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                         US-09-854-883-305/c
```

```
ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Query Match 0.3%; Score 15.2; DB 1; Length 20; Best Local Similarity 85.0%; Pred. No. 5.9e+02; Matches 17; Conservative 0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Thurber, Denise
Zeng, Bin
TITLE OF INVENTION: Coding Sequences of the Human
BRCA1 Gene
                                                                                                                                                                                                                                                                                                                            LENGTH: 20 base pairs
TYPE: nucleic acid
STRANDEDNESS: No. US20020183268A1 Relevant
                                                                                         FILING DATE: 12-Feb-96
ATTOREY/AGENT INFORMATION:
NAME: Michael S. Tuscan
REGISTRATION NUMBER: 43,210
REFERENCE/DOCKET NUMBER: 44921-5055-02-US
TELECOMMUNICATION INFORMATION:
TELEPHONE: 202-739-3000
                          : US 08/966,436
. US20020183268A1-97
: US 08/598,591
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ADDRESSEE: Morgan Lewis & Bockius LLP
STREET: 1111 Pennsylvania Avenue N. W.
CITY: Washington
STATE: DC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           COUNTRY: USA
ZIP: 20004
COMPUTEN READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTEN: IBM PC COMPACIBLE
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PATENTIN Release #1.0, Ver
CURRENT APPLICATION UNMER: US/09/982,828
FILING DATE: 22-Oct-2001
CLASSIFICATION: <Unknown>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 09/074,453
FILING DATE: 1998-05-06
APPLICATION NUMBER: US 08/798,691
FILING DATE: 1997-02-12
APPLICATION NUMBER: US 08/598,591
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      STRAIN: 19F primer
SEQUENCE DESCRIPTION: SEQ ID NO: 61:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         APPLICANT: Murphy, Patricia D.
Allen, Antonette C.
Alvares, Christopher P.
Critz, Brenda S.
Olson, Sheri J.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             4104 CTGTCATCCTTCCAGGGCTC 4123
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Sequence 61, Application US/09982828 Publication No. US20030022184A1 GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           FILING DATE: 1996-02-12
ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              NAME: Michael S. Tuscan
                                                                                                                                                                                                                                                                                                                                                                                                  TOPOLOGY: linear
MOLECULE TYPE: DNA (genomic)
ORIGINAL SOURCE:
                                                                                                                                                                                                                                                      TELEFAX: 202-739-3001
INFORMATION FOR SEQ ID NO: 61:
SEQUENCE CHARACTERISTICS:
                          APPLICATION NUMBER:
FILING DATE: 07-NO.
APPLICATION NUMBER:
       PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CORRESPONDENCE ADDRESS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         NUMBER OF SEQUENCES:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    US-09-734-672-61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          RESULT 697
US-09-982-828-61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ò
; OTHER INFORMATION: FIN-C sequence. Amplifies a region coding for envelope gene.
US-09-817-135B-15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ö
                                                                                                                                                                                                                                                                                                                                                                                    APPLICANT: C. Frank Bennett
APPLICANT: C. Frank Bennett
APPLICANT: Takabhi Kei Kishimoto
APPLICANT: Takabhi Kei Kishimoto
APPLICANT: Lex M. Cowest
TITLE OF INVENTION: ANTISENSE MODULATION OF CYTOHESIN-1 EXPRESSION
FILE REFERENCE: FRO-095
CURRENT APPLICATION NUMBER: US/09/791,243
CURRENT FILING DATE: 2001-02-22
NUMBER OF SEQ ID NOS: 89
SEQ ID NO 31
                                                                                                                   ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ö
                                                                        Length 20;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                0.3%; Score 15.2; DB 1; Length 20;
85.0%; Pred. No. 5.9e+02;
tive 0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Sequence 61, Application US/09734672;
Publication No. US20020183268A1
GENERAL INFORMATION:
APPLICANT: Murphy, Patricia D.
Allen, Antonette C.
Alvares, Christopher P.
Critz, Brenda S.
Olson, Sheri J.
Schelter, Denise B.
Zeng, Bin
TITLE OF INVENTION: Coding Sequences of the Human
                                                                                                                   Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.30
                                                                   Query Match 0.3%; Score 15.2; DB 1; Best Local Similarity 85.0%; Pred. No. 5.9e+02; Matches 17; Conservative 0; Mismatches 3;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CORRESPONDENCE ADDRESS:
ADDRESSEE: Morgan Lewis & Bockius LLP
STREET: 1111 Pennsylvania Ave., N.W.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            OTHER INFORMATION: Antisense Oligonucleotide
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/734,672
PILING DATE: 03-Dec-2000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CITY: Washington
STATE: District of Columbia
                                                                                                                                                                                                                                                                                                                          ; Sequence 31, Application US/09791243; Patent No. US20020147164A1; GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ZIP: 20004
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
                                                                                                                                                               765 CTATAAACAAGAGCTGGAGG 784
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              365 CCCTCCACCAACAGCCCCATC 384
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1 CCCTCCACCACCGCCGTC 20
                                                                                                                                                                                                        1 cratraacaacacarcc 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TYPE: DNA ORGANISM: Artificial Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            NUMBER OF SEQUENCES: 72
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Best Local Similarity 85.09
Matches 17; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   COUNTRY: USA
                                                                                                                                                                                                                                                                                                      US-09-791-243-31
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    US-09-791-243-31
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             RESULT 696
US-09-734-672-61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Query Match
                                                                                                                                                               ઠ
                                                                                                                                                                                                      셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ò
```

Gapa

gibbs-10-667-022-4.rnpb

```
TYPE: DNA
CORGANISM: Homo sapiens
US-09-923-327-125
                                                                                                                                                                                                                                                                   RESULT 699
US-09-917-963-44/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         US-09-923-327-125
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          셤
                                                                                                                                                                ð
                                                                                                                                                                                                        엄
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Š
                                                                                                                                                                                                                                                                                                                                                                               ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Legal Department, Hewlett-Packard
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Sequence 549, Application US/09784674
Publication No. US20030054346A1
GENERAL INPORMATION:
Molber, Paul K.
Delenstarr, Glenda C.
Webb, Peter G.
Kincald, Robert H.
TITLE OF INVENTION: Methods for evaluating oligonucleotide
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     COMPUTER KEALABLE FURPY

WEDDING TYPE: FLORPY disk

COMPUTER: IBM PC compatible

OPERATING SYSTEM: PC-DOS/MS-DOS

SOFFWARE: Patentin Release #1.0, Version #1.30

CURRENT APPLICATION DATA:

APPLICATION DATA:

PILING DATE: 15-Feb-2001

CLASSIFICATION: No. US20030054346A1 available

PRIOR APPLICATION DATA:

APPLICATION NUMBER: 09/021,701

PILING DATE: 10-FEB-1998

ATTORNEY/AGENT INFORMATION:

NAME: Choi, Wendy A. 36,697

REGISTRATION NUMBER: 36,697

REPERBUCE/DOCKET NUMBER: 10971464-1

TELEPARIONE: 650-236-2366

INFORMATION: FOR SEQ ID NO: 549:

SEQUENCE CHARACTERISTICS:

LENGTH: 20 base pairs
                                                                                                                                                                                                                                                                                                                                 0.3%; Score 15.2; DB 1; Length 20; 85.0%; Pred. No. 5.9e+02; tive 0; Mismatches 3; Indels
REFERENCE/DOCKET NUMBER: 44921-5053-01-US TELECOMMUNICATION INFORMATION: TELEPHONE: 202-739-3000
                                                                                                                                                                                                                                       STRAIN: 19F primer; SEQUENCE DESCRIPTION: SEQ ID NO: 61: US-09-982-828-61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CORRESPONDENCE ADDRESS:
ADDRESSER: Records Manager, Le
Company M/S 20BO
STREET: 3000 Hanover Street
CITY: Palo Alto
STATE: CA
COUNTRY: USA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               probe sequences NUMBER OF SEQUENCES
                                                                                                                                                 TYPE: nucleic acid
STRANDEDNESS: not relevant
                                                                                                                                                                                                                                                                                                                                                                                                                         4104 CTGTCATCCTTCCAGGGCTC 4123
                                                                                                                                                                                         TOPOLOGY: linear
MOLECULE TYPE: DNA (genomic)
ORIGINAL SOURCE:
                                                           TELEFAX: 202-739-3001
INFORMATION FOR SRQ ID NO: 61:
SRQUENCE CHARACTERISTICS:
LENGTH: 20 base pairs
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TYPE: nucleic acid
STRANDEDNESS: single
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ZIP: 94304
COMPUTER READABLE FORM:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TOPOLOGY: linear MOLECULE TYPE: cDNA
                                                                                                                                                                                                                                                                                                                                        Query Match 0.33
Best Local Similarity 85.03
Matches 17; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 RESULT 698
US-09-784-674-549/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                               g
                                                                                                                                                                                                                                                                                                                                                                                                                              ઠે
```

```
APPLICANT: WURRHY, Patricia D.
TITLE OF INVENTION: Determining Common Functional Alleles in a Population and Uses Thr
TITLE OF INVENTION: Determining Common Functional Alleles in a Population and Uses Thr
FILE REPERENCE: 044921-5054-02
CURRENT APPLICATION NUMBER: US/09/923,327
CURRENT FILING DATE: 1906-02-12
PRIOR PELICATION WUMBER: US 08/596,591
PRIOR APPLICATION WUMBER: US 08/796,691
PRIOR APPLICATION WUMBER: US 08/796,691
PRIOR APPLICATION WUMBER: US 08/905,772
PRIOR PILING DATE: 1997-08-04
PRIOR FILING DATE: 1998-05-22
PRIOR APPLICATION WUMBER: US 09/084,471
PRIOR FILING DATE: 1998-08-22
PRIOR APPLICATION WUMBER: US 09/224,794
PRIOR APPLICATION WUMBER: US 09/224,794
PRIOR APPLICATION WUMBER: US 09/524,794
                                                                                                                                                                                                                                                                                                                                                                                                                                                            Sequence 44, Application US/09917963
; Sequence 44, Application US/09917963
; Sequence 47, Application US/09917963
; Sequence 48, Application US 20000086912A1
; GENERAL INFORMATION:
    APPLICANT: ROSABLE M. Crooke
; APPLICANT: Mark J. Graham
; TITLE OF INVENTION: ANTISENSE MODULATION OF MICROSOWAL TRIGLYCERIDE TRANSFER PROTEIN
; TITLE OF INVENTION: EXPRESSION
; FILE REFERENCE: ISPH-0591
; CURRENT APPLICATION NUMBER: US/09/917,963
; CURRENT FILING DATE: 2001-07-30
; NUMBER OF SEQ ID NOS: 137
; LENGTH: 20
                                                                                                                                                                                                 ö
                                                                                                                                                                                                        ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         0.3%; Score 15.2; DB 1; Length 20; 85.0%; Pred. No. 5.9e+02;
                                                                                                                                           Length 20;
                                                                                                                                     Query Match
0.3%; Score 15.2; DB 1;
Best Local Similarity 85.0%; Pred. No. 5.9e+02;
Matches 17; Conservative 0; Mismatches 3;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ; FEATURE:
; OTHER INFORMATION: Antisense Oligonucleotide
US-09-917-963-44
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        0; Mismatches
; ANTI-SENSE: NO SEQUENCE DESCRIPTION: SEQ ID NO: 549: US-09-784-674-549
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Sequence 125, Application US/09923327
Publication No. US20030096236A1
GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        2971 GCCAATATAGTGGACCAGAG 2990
                                                                                                                                                                                                                                                                 3311 AAAATAAAAACCAGTAATA 3330
                                                                                                                                                                                                                                                                                                                          20 AAAAGAAAAATCAGTAACA 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               NUMBER OF SEQ ID NOS: 260
SOFWARE: Patentin version 3.1
SEQ ID NO 125
LENCTH: 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TYPE: DNA ORGANISM: Artificial Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Query Match 0.33
Best Local Similarity 85.03
Matches 17; Conservative
```

```
ö
                                                                                                                                                                                                                                                  TITLE OF INVENTION: CODING SEQUENCE HAPLOTYPE OF THE HUMAN BRCA1 GENE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        APPLICANT: Donna T. Ward
APPLICANT: Donna T. Ward
APPLICANT: Andrew T. Watt
TITLE OF INVENTION: ANTIEBNSE MODULATION OF RECQLS EXPRESSION
FILE REPERENCE: RTS-0203
CURRENT APPLICATION NUMBER: US/10/238,443
CURRENT FILING DATE: 2002-09-09
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Length 20;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      IndelB
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ZIP: 20004
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: SYSTEM: PC-DOS/MS-DOS
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.30
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            REFERENCE/DOCKET NUMBER: 044921-5049-01-US TELECOMMUNICATION INFORMATION: TELEPHONE: 202-739-3000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Query Match
0.3%; Score 15.2; DB 1;
Best Local Similarity 85.0%; Pred. No. 5.9e+02;
Matches 17; Conservative 0; Mismatches 3;
                                                                                                                                                                                                                                                                                                                              CORRESPONDENCE ADDRESS:
ADDRESSE: Morgan Lewis & Bockius LLP
STREET: 1111 Pennsylvania Avenue
CITY: Washington DC
STATE: District of Columbia
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/10/022,819
FILING DATE: 22-Apr-2002
CLASSIFICATION: <Unknown>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ; ANTI-SENSE: NO
; FRAGMENT TYPE: internal
; SEQUENCE DESCRIPTION: SEQ ID NO: 56:
US-10-022-819-56
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    PRIOR APPLICATION DATA:
PAPLICATION WUMBER: 09/074,452
FILING DATE: 1998-05-06
ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           REGISTRATION NUMBER: <Unknown>
                              Sequence 56, Application US/10022819; Publication No. US20030027166A1; GENERAL INFORMATION:
APPLICANT: ALLEN, Antonette C. OLSEN, Sheri J.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        4104 CTGTCATCCTTCCAGGGCTC 4123
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Sequence 51, Application US/10238443
Publication No. US20030083302A1
GENERAL INFORMATION:
                                                                                                                                                                LAWRENCE, Tammy
ANGELLY, Tracy S.
RABIN, Mark B.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TELEFAX: 202-739-3001
INFORMATION FOR SEQ ID NO: 56:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         DESCRIPTION: /desc
                                                                                                                                                                                                                                                                                                       SEQUENCES:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         US-10-238-443-51/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ð
                                                                                                                                                                                                                                                                                            Sequence 77, Application US/09954679
Publication No. US20030100522A1
GENERAL INFORMATION:
APPLICANT: Donna T. Ward
APPLICANT: Andrew T. Watt
TITLE OF INVENTION: ANTISENSE MODULATION OF RIBONUCLEASE L (2',5'-OLIGOISOADENYLATE)
TITLE OF INVENTION: SYNTHETASE-DEPENDENT) EXPRESSION
TITLE OF INVENTION: SYNTHETASE-DEPENDENT) EXPRESSION
FILE REPERENCE: RTS-021
CURRENT APPLICATION NUMBER: US/09/954,679
CURRENT PILING DATE: 2001-09-12
NUMBER OF SEQ ID NOS: 88
SEQ ID NO 77
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       NS-09-782-604-4/c

Sequence 4, Application US/09782604

Sequence 4, Application No. US20030143534A1

Sequence 4, Application No. US20030143534A1

Sequence 4, Application No. US20030143534A1

APPLICANT: GOSWAMI, USHA

APPLICANT: GOSWAMI, SUBHASH CHANDER

APPLICANT: JOHNSON, ROBERT K.

TITLE OF INVENTION: PROBES FOR MYCTOPHID FISH AND A METHOD FOR DEVELOPING

TITLE OF INVENTION: THE SAME

FILE REFERENCE: 05689/0117

CURRENT APPLICATION UNDRER: US/09/782,604

CURRENT FILING DATE: 2001-02-14

NUMBER OF SEQ ID NOS: 45

SOFTWARE: Patentin Ver. 2.1

LENGTH: 20
                                                             ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ò
                                                             .
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              , OTHER INFORMATION: Description of Artificial Sequence: Primer
US-09-782-604-4
        Length 20;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Query Match 0.3%; Score 15.2; DB 1; Length 20; Best Local Similarity 85.0%; Pred. No. 5.9e+02; Matches 17; Conservative 0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            0.3%; Score 15.2; DB 1; Length 20; ilarity 85.0%; Pred. No. 5.9e+02; Conservative 0; Mismatches 3; Indels
                                                        3; Indels
Query Match
0.3%; Score 15.2; DB 1;
Best Local Similarity 85.0%; Pred. No. 5.9e+02;
Matches 17; Conservative 0; Mismatches 3;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ; OTHER INFORMATION: Antisense Oligonucleotide US-09-954-679-77
                                                                                                             4104 CTGTCATCCTTCCAGGGCTC 4123
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    3402 GCAACTCATCCAGCAAAGC 3421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          4424 CATCTGTGTCCTACTACAGG 4443
                                                                                                                                                                crercarretrecrerecre 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                20 CATCIGGITCCTACTICAGG 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TYPE: DNA
ORGANISM: Artificial Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TYPE: DNA
ORGANISM: Artificial Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Query Match
Best Local Similarity
Matches 17; Conserva
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    유
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ઠ
```

```
ö
                                                                                                                                                                                                                                                                                                                  ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Gaps
                                                                                                                                                                                                                                                                                                                     Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     RESULT 706
US-10-309-362-51/C
US-10-309-362-51/C
Sequence 51, Application US/10309362
Publication No. US20030114412A1
GENERAL INFORMATION:
APPLICANT: Donna T. Wart
TITLE OF INVENTION: ANTISENSE MODULATION OF RECQL5 EXPRESSION
TITLE OF INVENTION: ANTISENSE WODULATION OF RECQL5
CURRENT APPLICATION NUMBER: US/10/309,362
CURRENT APPLICATION NUMBER: US/10/309,362
CURRENT APPLICATION NUMBER: US/10/309,362
FRIOR APPLICATION NUMBER: US/10/309,362
PRIOR PILING DATE: 2001-03-01
NUMBER OF SEQ ID NOS: 92
LENGTH: 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ö
                                                                                                                                                                                                                                                                                                                     ô
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             , OTHER INFORMATION: Description of Artificial Sequence: Primer
US-10-094-458A-15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Sequence 15, Application US/10094458A
; Bequence 15, Application US/10094458A
; Publicacion No. US20030097685A1
; GENERAL INFORMATION:
; APPLICANT: BENNING, CHRISTOPHER
; APPLICANT: CERNAC, ALEX
; TITLE OF INVENTION: LIPID METABOLISM REGULATORS IN PLANTS
; FILE REFERENCE: 16313.0097
; CURRENT APPLICATION NUMBER: US/10/094,458A
; CURRENT FILING DATE: 2002-10-10
; PRIOR APPLICATION NUMBER: 60/274,170
; PRIOR PLIING DATE: 2001-03-08
; NUMBER OF SEQ ID NOS: 39
; SOFTWARE: PATENTIN VOY: 2.1
; SEQ ID NO 15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Query Match 0.3%; Score 15.2; DB 1; Length 20; Best Local Similarity 85.0%; Pred. No. 5.9e+02; Matches 17; Conservative 0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                0.3%; Score 15.2; DB 1; Length 20;
85.0%; Pred. No. 5.9e+02;
tive 0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ) OTHER INFORMATION: Antisense Oligonuclectide US-10-309-362-51
                                                                                                                                                                                                CTHER INFORMATION: Antisense Oligonucleotide US-10-238-443-51
PRIOR APPLICATION NUMBER: US/09/798,185
PRIOR FILING DATE: 2001-03-01
NUMBER OF SEQ 1D NOS: 92
SEQ 1D NO 51
LENGTH: 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 2896 CAGGGAATGACAGAGGAAGA 2915
                                                                                                                                                                                                                                                                                                                                                                     4083 CCAGTTGCCAATTTCAAGTC 4102
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 20 cagagagrgacaaaggaaga 1
                                                                                                                                                                                                                                                                                                                                                                                                   CCAGTIGCCATCTICAAGAC 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ORGANISM: Artificial Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TYPE: DNA ORGANISM: Artificial Sequence
                                                                                                                                   TYPE: DNA ORGANISM: Artificial Sequence
                                                                                                                                                                                                                                                                            Query Match 0.33
Best Local Similarity 85.03
Matches 17; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               RESULT 705
US-10-094-458A-15/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TYPE: DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      a
                                                                                                                                                                                                                                                                                                                                                                                                                        g
                                                                                                                                                                                                                                                                                                                                                                               8
```

```
US-10-109-349A-4

US-10-109-349A-4

Sequence 4, Application US/10109349A

Sequence 4, Application No. US20030186246A1

GENERAL INFORMATION

APPLICANT: Wedical College of Ohio

APPLICANT: Willey, James C.

APPLICANT: Willey, MILTIPLEX STANDARDIZED REVERSE TRANSCRIPTASE-POLYMERASE CHAIN REP

TITLE OF INVENTION: WILTIPLEX STANDARDIZED REVERSE TRANSCRIPTASE-POLYMERASE CHAIN REP

TITLE OF INVENTION: WILTIPLEX STANDARDIZED REVERSE TRANSCRIPTASE-POLYMERASE CHAIN REP

TITLE OF INVENTION: WILTIPLEX STANDARDIZED REVERSE TRANSCRIPTASE-POLYMERASE CHAIN REP

TITLE OF INVENTION: WILTIPLEX STANDARDIZED REVERSE TRANSCRIPTASE-POLYMERASE CHAIN REP

TITLE OF INVENTION: WILTIPLEX STANDARDIZED REVERSE TRANSCRIPTASE-POLYMERASE CHAIN REP

TITLE OF INVENTION: WILTIPLEX STANDARDIZED REVERSE TRANSCRIPTASE-POLYMERASE CHAIN REP

TITLE OF INVENTION: WILTIPLEX STANDARDIZED REVERSE TRANSCRIPTASE-POLYMERASE CHAIN REP

TITLE OF INVENTION: WILTIPLEX STANDARDIZED REVERSE TRANSCRIPTASE-POLYMERASE CHAIN REP

TITLE OF INVENTION: WILTIPLEX STANDARDIZED REVERSE TRANSCRIPTASE-POLYMERASE CHAIN REP

TITLE OF INVENTION: WILTIPLEX STANDARDIZED REVERSE TRANSCRIPTASE-POLYMERASE CHAIN REP

TITLE OF INVENTION: WILTIPLEX STANDARDIZED REVERSE TRANSCRIPTASE-POLYMERASE CHAIN REP

TITLE OF INVENTION: WILTIPLEX STANDARDIZED REVERSE TRANSCRIPTASE-POLYMERASE DATE TO THE TRANSCRIPTASE TRANSCRIPTASE TRANSCRIPTASE TO THE TRANSCRIPTASE TRANSCRIPTASE TRANSCRIPTASE TRANSCRIPTASE TRANSCRIPTASE TRANSCRIPTASE TO THE TRANSCRIPTASE TRANSCRIPTASE TRANSCRIPTASE TRANSCRIPTASE TO THE TRANSCRIPTASE TRA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ö
                                                                                     ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Gaps
                                                                                     Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ;
0
                                                                                         ö
                                                                                                                                                                                                                                                                                                                                                                               RESULT 707
US-10-174-794-9/C
US-10-174-794-9/C
; Sequence 9, Application US/10174794
; Publication No. US20030166220A1
; GENERAL INFORMATION:
; APPLICANT: University of Southern California
; APPLICANT: University of Southern California
; TITLE OF INVENTION: CDN4, GENOMIC, AND PREDICTED PROTEIN
; TITLE OF INVENTION: SEQUENCES OF LEARNING-INDUCED KINASES
; TILE REFERENCE: 13761-707
; CURRENT APLICATION NUMBER: US/10/174,794
; CURRENT FILING DATE: 2002-06-18
; PRIOR FILING DATE: 1999-10-02
; PRIOR FILING DATE: 1999-10-02
; NUMBER: OF SEQ ID NOS: 16
; SOFTWARE: FASTESQ for Windows Version 4.0
; SEQ ID NO 9
; LENGTH: 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         0.3%; Score 15.2; DB 1; Length 20;
85.0%; Pred. No. 5.9e+02;
tive 0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Length 20;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Indels
                                                                                              3; Indels
Query Match 0.3%; Score 15.2; DB 1; Length Best Local Similarity 85.0%; Pred. No. 5.9e+02; Matches 17; Conservative 0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Query Match
0.3%; Score 15.2; DB 1;
Best Local Similarity 85.0%; Pred. No. 5.9e+02;
Matches 17; Conservative 0; Mismatches 3;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    2144 ATGACACAGAGCTCCAAGCC 2163
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ; OTHER INFORMATION: Antisense primer US-10-174-794-9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    2680 CAACCAATAATACAGATTGA 2699
                                                                                                                                                                               4083 CCAGTTGCCAATTTCAAGTC 4102
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1 ATGACACAGAGCTGGTAGCC 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        20 CAACCAAGAAGAAGATTGA 1
                                                                                                                                                                                                                                                            20 ccastriccarcricaasac 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TYPE: DNA
ORGANISM: Artificial Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Query Match
Best Local Similarity 85.01
Matches 17; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TYPE: DNA
ORGANISM: Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 US-10-109-349A-4
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         임
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ઠ
                                                                                                                                                                                                ઠે
                                                                                                                                                                                                                                                                    셤
```

```
Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Sequence 81, Application US/10160497
; Publication No. US20030224513A1
; Publication No. US20030224513A1
; GENERAL INFORMATION:
; APPLICANT: Susan M. Freier
; APPLICANT: Kenneth W. Dobie
; APPLICANT: Kenneth W. Dobie
; TILE OF INVENTION: ANTISENSE MODULATION OF NOTCH1 EXPRESSION
; FILE REFERENCE: RTS-036
; CURRENT APPLICATION NUMBER: US/10/160,497
; CURRENT FILING DATE: 2002-05-30
; NUMBER OF SEQ ID NOS: 145
; SEQ ID NO 81
; LENTH: 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ö
                          APPLICANT: SURJUGATION OF Preier APPLICANT: Brett P. Monia APPLICANT: Madeline M. Butler PAPLICANT: Madeline M. Butler APPLICANT: Madeline M. Butler APPLICANT: Madeline M. Butler APPLICANT: Robert McKay ITILE OF INVENTION: ANTISENSE MODULATION OF PTPLB EXPRESSION FILE REFERENCE: 1SPH-0576; CURRENT APPLICATION NUMBER: US/10/360,510; CURRENT FILING DATE: 2003-02-07; PRIOR APPLICATION NUMBER: US/09/854,883; PRIOR FILING DATE: 2000-07-31; PRIOR PR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Query Match 0.3%; Score 15.2; DB 1; Length 20; Best Local Similarity 85.0%; Pred. No. 5.9e+02; Matches 17; Conservative 0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Query Match 0.3%; Score 15.2; DB 1; Length 20; Best Local Similarity 85.0%; Pred. No. 5.9e+02; Matches 17; Conservative 0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ; OTHER INFORMATION: Antisense Oligonucleotide US-10-360-510-305
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      , OTHER INFORMATION: Antisense Oligonucleotide US-10-160-497-81
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Sequence 138, Application US/10160497
Publication No. US20030224513A1
GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  2152 GAGCTCCAAGCCTTACATGA 2171
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            47 TGCTGGGGCTGCAGCTG 66
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1 recredencrecaccaders 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            20 GGCCCCAGCCTTTCATGA 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TYPE: DNA ORGANISM: Artificial Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ORGANISM: Artificial Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        APPLICANT: Susan M. Freier
APPLICANT: Kenneth W. Dobie
APPLICANT: Erich Koller
       Jacqueline Wyatt
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              JS-10-160-497-138/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    JS-10-160-497-81
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TYPE: DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         APPLICANT: CLAVEL, Francois
APPLICANT: MAWMANO, Fabrizio
APPLICANT: RACE, Bather
APPLICANT: RACE, Bather
APPLICANT: RACE, Bather
APPLICANT: TROUPLIN, Virginie
TITLE OF INVENTION: Characteristics
FILE OF INVENTION: Characteristics
FILE REPERENCE: B7780US
CURRENT APPLICATION NUMBER: US/10/263,655
CURRENT PILING DATE: 2002-10-04
PRIOR PILING DATE: 2001-03-27
NUMBER OF SEQ ID NOS: 27
SOFTWARE: Patentin version 3.0
SEQ ID NO 15.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Query Match 0.3%; Score 15.2; DB 1; Length 20; Best Local Similarity 85.0%; Pred. No. 5.9e+02; Matches 17; Conservative 0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Query Match 0.3%; Score 15.2; DB 1; Length 20; Best Local Similarity 85.0%; Pred. No. 5.9e+02; Matches 17; Conservative 0; Mismatches 3; Indels
                  Sequence 34, Application US/10021707
Publication No. US20030186903A1
GENERAL INFORMATION:
APPLICANT: James Karras
APPLICANT: Asmorth Dobie
TITLE OF INVENTION: ANTISENSE MODULATION OF MYD88 EXPRESSION
FILE REFERENCE: RTS-0330
CURRENT APPLICATION NUMBER: US/10/021,707
CURRENT FILING DATE: 2001-11-23
NUMBER OP SEQ ID NOS: 89
: LENGTH: 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ; FEATURE:
; OTHER INFORMATION: Antisense Oligonucleotide
US-10-021-707-34
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   2395 TGGCAAAGCTCCTCAATTCT 2414
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Sequence 305, Application US/10360510 publication No. US20030220282A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Sequence 15, Application US/10263655; Publication No. US20030207294A1; GENERAL INFORMATION: APPLICANT: CLAVEL, Francois; APPLICANT: CLAVEL, Francois
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          765 CTATAAACAAGAGCTGGAGG 784
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1 rescharcerecreaniser 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CTATTAACAAGAGATGGTGG 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                TYPE: DNA
ORGANISM: Artificial Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ORGANISM: artificial sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      RESULT 711
US-10-360-510-305/c
US-10-021-707-34
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TYPE: DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ठे
```

```
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Gaps
                                                                                                                                                                                                                                                                                                                Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | Sequence 81, Application US/10348750
| Publication No. US2003225019A1
| GENERAL INFORMATION:
| APPLICANT: Susan M. Freier
| APPLICANT: Susan M. Freier
| APPLICANT: Exich Koller
| TILLE OP INVENTION: NOTCHI INHIBITORS FOR INDUCING APOPTOSIS
| FILE REFERENCE: ISPH-0729
| CURRENT PILING DATE: 2003-01-21
| PRIOR PILING DATE: 2003-01-21
| PRIOR PILING DATE: 2002-0-20
| NUMBER OF SEQ ID NOS: 146
| SEQ ID NO 81
                                                                                                                                                                                                                                                                                                                ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Sequence 138, Application US/10348750
| Sequence 138, Application No. US20030225019A1
| GENERAL INPORMATION:
| APPLICANT: Susan M. Freier
| APPLICANT: Kenneth M. Dobie
| TITLE OF INVENTION: NOTCH! INHIBITORS FOR INDUCING APOPTOSIS
| FILE REFERENCE: ISPH-0729
| CURRENT APPLICATION NUMBER: US/10/348,750
| CURRENT APPLICATION NUMBER: 10/10/4497
| PRIOR FILING DATE: 2002-02-20
| NUMBER OF SEQ ID NOS: 146
| SEQ ID NO 138
TITLE OF INVENTION: ANTISENSE MODULATION OF NOTCH1 EXPRESSION
                                                                                                                                                                                                                                                                  Query Match 0.3%; Score 15.2; DB 1; Length 20; Best Local Similarity 85.0%; Pred. No. 5.9e+02; Matches 17; Conservative 0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     0.3%; Score 15.2; DB 1; Length 20;
85.0%; Pred. No. 5.9e+02;
tive 0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  FEATURE:
, OTHER INFORMATION: Antisense Oligonucleotide US-10-348-750-81
                  FILE REFERENCE: RTS-0386
CURRENT APPLICATION NUMBER: US/10/160,497
CURRENT FILING DATE: 2002-05-30
NUMBER OF SEQ ID NOS: 145
SEQ ID NO 138
LENGTH: 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               47 TGCTGGGCTGCAGCTG 66
                                                                                                                                                                                                                                                                                                                                                            47 TGCTGGGCTGCAGCTG 66
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         recreeercrecaccaeere 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TYPE: DNA
ORGANISM: Artificial Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Best Local Similarity 85.0
Matches 17; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TYPE: DNA
CORGANISM: H. sapiens
US-10-348-750-138
                                                                                                                                                          TYPE: DNA
ORGANISM: H. sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                US-10-348-750-138/c
                                                                                                                                                                                                                           US-10-160-497-138
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                US-10-348-750-81
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Query Match
                                                                                                                                                                                                        FEATURE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      셤
                                                                                                                                                                                                                                                                                                                                                                 ð
                                                                                                                                                                                                                                                                                                                                                                                                    g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ð
```

```
%Sequence 42, Application US/10175492

Sequence 42, Application World 10175492

Sequence 42, Application World 1020323442A1

Sequence 42, Application World 1020323442A1

SEQUENCE AND INFORMATION: APPLICANT: Kenneth W. Dobie

TITLE OF INVENTION: ANTISENSE MODULATION OF PAZ/PIWI DOMAIN-CONTAINING PROTEIN EXPRESS:

CURRENT APPLICATION NUMBER: US/10/175,492

CURRENT FILING DATE: 2002-06-17

NUMBER OF SEQ ID NOS: 164

SEQ ID NO 42

LENGTH: 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Sequence 120, Application US/10175492
Publication No. US20030232442A1
GENERAL INFORMATION:
TITLE OF INVENTION: ANTISENSE MODULATION OF PAZ/PIWI DOMAIN-CONTAINING PROTEIN EXPRESSIBLE REFERENCE: RTS-0435
CURRENT APPLICATION NUMBER: US/10/175,492
CURRENT APPLICATION NUMBER: US/10/175,492
CURRENT PILING DATE: 2002-06-17
NUMBER OF SEQ ID NOS: 164
SEQ ID NO 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ô
                                            ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ö
                                              Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ö
                                            ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            0.3%; Score 15.2; DB 1; Length 20; 85.0%; Pred. No. 5.9e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Length 20;
  Length 20;
                                            Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Query Match
0.3%; Score 15.2; DB 1;
Best Local Similarity 85.0%; Pred. No. 5.9e+02;
Matches 17; Conservative 0; Mismatches 3;
Score 15.2; DB 1;
Pred. No. 5.9e+02;
0; Mismatches 3;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ; OTHER INFORMATION: Antisense Oligonucleotide US-10-175-492-42
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Sequence 42, Application US/10452002A; Publication No. US20030236195A1; GENERAL INFORMATION: APPLICANT: Jerald S. Feitelson APPLICANT: H. Ernest Schnepf; APPLICANT: Kenneth B. Narva
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    2136 TGGAAATTATGACACAGAGC 2155
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 2136 TGGAAATTATGACACAGAGC 2155
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TGCAAATTATGAAACAGATC 20
                                                                                     47 TGCTGGGGCTGCAGCTG 66
                                                                                                                               20 recresercrecaccasers 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              20 TGCAAATTATGAAACAGATC 1
  Query Match 0.3%;
Best Local Similarity 85.0%;
Matches 17; Conservative 0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TYPE: DNA ORGANISM: Artificial Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TYPE: DNA
ORGANISM: H. sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Query Match
Best Local Similarity
Matches 17; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      US-10-175-492-120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         RESULT 718
US-10-452-002A-42
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     셤
                                                                                          à
                                                                                                                               셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ઠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            셤
```

```
APPLICANT: C. Frank Bennett
APPLICANT: Kenneth W. Dobie
TITLE OF INVENTION: ANTISENSE MODULATION OF GERANYLGERANYL DIPHOSPHATE SYNTHAGE 1 EXP.
FILE REFERENCE: PTS-0021
CURRENT APPLICATION NUMBER: US/10/189,268
CURRENT APPLICATION NOMBER: US/2002-07-02
NUMBER OF SEQ ID NOS: 131
SEQ ID NO 109
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Sequence 4301, Application US/10349143

Sequence 4301, Application US/10349143

Publication No. US20040005584A1

GENERAL INFORMATION:

APPLICANT: Cohen, Daniel

APPLICANT: Chunakov, Ilya

TITLE OF ILWENTION: Biallelic markers for use in constructing a high density...

FILE REFERENCE: GENSET. 0200Cp1

CURRENT APPLICATION NUMBER: US/10/349,143

CURRENT APPLICATION NUMBER: US/00/422,978

PRIOR APPLICATION NUMBER: EARLIER APPLICATION NUMBER: US 09/298,850

PRIOR APPLICATION NUMBER: EARLIER APPLICATION NUMBER: US 60/109,732

PRIOR FILING DATE: EARLIER FILING DATE: 1999-04-21

PRIOR FILING DATE: EARLIER FILING DATE: 1999-11-23

PRIOR FILING DATE: EARLIER FILING DATE: 1998-11-23

NUMBER OF SEQ ID NOS: 11796

LENGTH: 20

LENGTH: 20

LENGTH: 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       PEATURE:
NAME/KEY: primer_bind
NAME/KEY: D: 1.20
NOTHER INFORMATION: upstream amplification primer 99-14598 for SEQ 367, US-10-349-143-4301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ô
                                                                                                                                                                                                                                                                                                                                                                                                                                                 Query Match 0.3%; Score 15.2; DB 1; Length 20; Best Local Similarity 85.0%; Pred. No. 5.9e+02; Matches 17; Conservative 0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 0.3%; Score 15.2; DB 1; Length 20;
85.0%; Pred. No. 5.9e+02;
tive 0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 4083 CCAGTIGCCAATTICAAGIC 4102
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            2082 TAATATGGAAAATGACCCCA 2101
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Sequence 72, Application US/10188470
Publication No. US20040005707A1
GENERAL INFORMATION:
APPLICANT: Scott Cooper
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1 ccastrcacaaarrcaastc 20
     Publication No. US20040005570A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Kenneth W. Dobie
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Query Match 0.3
Best Local Similarity 85.0
Matches 17; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TYPE: DNA
ORGANISM: Homo Sapiens
                                                                                                                                                                                                                                                                                                                   TYPE: DNA
ORGANISM: H. sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           US-10-188-470-72/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      JS-10-349-143-4301
                                                                                                                                                                                                                                                                                                                                                                                                JS-10-189-268-109
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               RESULT 722
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Sequence 39, Application US/10189268
Publication No. US20040005570A1
GENERAL INFORMATION:
APPLICANT: C. Frank Bennett
APPLICANT: Kenneth W. Dobie
TITLE OF INVENTION: ANTISENSE MODULATION OF GERANYLGERANYL DIPHOSPHATE SYNTHASE 1 EXF
TITLE SEPERENCE: PTS-0021
CURRENT APPLICATION NUMBER: US/10/189,268
CURRENT FILING DATE: 2002-07-02
NUMBER OF SEQ ID NOS: 131
SEQ ID NO 39
LENGTH: 20
                                                                                                                                   APPLICANT: George Morrill
APPLICANT: Stacey Finstad Lee
TITLE OF INVENTION: No. US20030236195Alel Pesticidal Proteins and Methods of Using TH
FILE REPERBUES: MA708C2D1
CURRENT APPLICATION NUMBER: US/10/452,002A
CURRENT FILING DATE: 2003-05-30
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ) OTHER INFORMATION: Description of Artificial Sequence: synthetic; OTHER INFORMATION: primer US-10-452-002A-42
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Query Match

0.3%; Score 15.2; DB 1; Length 20;
Best Local Similarity 85.0%; Pred. No. 5.9e+02;
Matches 17; Conservative 0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Score 15.2; DB 1; Length 20;
Pred. No. 5.9e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ; OTHER INFORMATION: Antisense Oligonucleotide US-10-189-268-39
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Query Match
0.3%; Score 15.2; D
Best Local Similarity 85.0%; Pred. No. 5.9e
Matches 17; Conservative 0; Mismatches
                                                                                                                                                                                                                                                                               CURRENT FILING DATE: 2003-05-30
PRIOR APPLICATION NUMBER: 09/307,106
PRIOR PILING DATE: 1999-05-07
PRIOR PELING DATE: 1999-05-07
PRIOR PILING DATE: 1998-05-06
PRIOR PILING DATE: 1998-05-06
PRIOR APPLICATION NUMBER: 08/960,780
PRIOR APPLICATION NUMBER: 08/029,848
PRIOR APPLICATION NUMBER: 60/029,848
PRIOR FILING DATE: 1996-10-30
NUMBER OF SEC ID NOS: 54
SOFTWARE: PALENTIN Ver. 2.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  RESULT 720
US-10-189-268-109/c
; Sequence 109, Application US/10189268
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TAATATGGAAAATGACCCCA 2101
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 827 TCCAGAAGCATCAGAAAA 846
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     rcccraagcarcagaara 20
Brian A. Stockhoff
James L. Schmeits
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ORGANISM: Artificial Seguence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TYPE: DNA
ORGANISM: Artificial Sequence
                                                                       Charles J. Dullum
Judy Muller-Cohn
Lisa Stamp
                                                 David Loewer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           US-10-189-268-39
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       2082
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         IYPE: DNA
```

g

ઠે

ö

셤

ઠે

```
ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Sequence 177, Application US/10619220
Publication No. US20040033979A1
GENERAL INFORMATION:
APPLICANT: Dean, Nicholas M.
APPLICANT: Wyatt, Jacqueline
APPLICANT: Zhang, Hong
TITLE OF INVENTION: Attisense Compound Modulation of Fas Mediated Signaling
FILE REFERENCE: ISPH-545
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Sequence 65, Application US/10199676

Publication No. US20040014051A1

Publication No. US20040014051A1

Publication No. US20040014051A1

APPLICANT: Vickie L. Brown-Driver

APPLICANT: Kenneth W. Dobie

TITLE REPRENCE: PTS-0017

CURRENT APPLICATION NUMBER: US/10/199,676

CURRENT FILING DATE: 2002-07-18

NUMBER OF SEQ ID NOS: 84

LENGTH: 20
                                                                                                                                                                                                                                             APPLICANT: Vickie L. Brown-Driver
APPLICANT: Kenneth W. Dobie
TITLE OF INVENTION: ANTIENSE MODULATION OF BREAST CANCER-1 EXPRESSION
FITLE OF INVENTION: ANTIENSE TS-0017
CURRENT APPLICATION NUMBER: US/10/199,676
CURRENT FILING DATE: 2002-07-18
NUMBER OF SEQ ID NOS: 84
LENGTH: 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Query Match 0.3%; Score 15.2; DB 1; Length 20; Best Local Similarity 85.0%; Pred. No. 5.9e+02; Matches 17; Conservative 0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Query Match 0.3%; Score 15.2; DB 1; Best Local Similarity 85.0%; Pred. No. 5.9e+02; Matches 17; Conservative 0; Mismatches 3;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ; OTHER INFORMATION: Antisense Oligonucleotide US-10-199-676-29
     1669 GGAGAGCCTAAGGAAATGG 1688
                                                                                                                                                                     Sequence 29, Application US/10199676; Publication No. US20040014051A1; GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             853 GAGAAGCAGCTATGCTCTT 872
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            853 GAGAAAGCAGCTATGCTCTT 872
                                                   1 GCAGAGAGTAAGGAAGATGG 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1 gegaaaccagcrarrcrcrr 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        20 GGGAAACCAGCTATTCTCTT 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ORGANISM: Artificial Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TYPE: DNA ORGANISM: H. sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          US-10-619-220-177
                                                                                                                                                     US-10-199-676-29
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           US-10-199-676-65
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TYPE: DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              FEATURE:
                                         g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ద
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        g
       ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Sequence 4833. Application US/10289762

Publication No. US20040006218A1

GENERAL INFORMATION:
GENERAL INFORMATION:
TITLE OF INVENTION: Chlamydia pneumoniae genomic sequence and polypeptides, fragments
TITLE OF INVENTION: thereof and uses thereof, in particular for the diagnosis, prever TITLE REPERENCE: 9710-003-999
TITLE REPERENCE: 9710-003-999
CURRENT APPLICATION NUMBER: US/10/289,762

CURRENT FILING DATE: 2003-03-27

NUMBER OF SEQ ID NOS: 6849

SEQ ID NO 4833
LENGTH: 20
                                                                                                                                                                                                                                                                                                                                                                              ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ö
TITLE OF INVENTION: ANTISENSE MODULATION OF INTEGRIN BETA 5 EXPRESSION PILE OF ENVENTED BY SEPRENCE: PTS-0024
CURRENT APPLICATION NUMBER: US/10/188,470
CURRENT FILING DATE: 2002-07-02
NUMBER OF SEQ ID NOS: 130
LENGTH: 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       APPLICANT: Scott Cooper
APPLICANT: Kenneth W. Dobie
TITLE OF INVESTION OF INTEGRIN BETA 5 EXPRESSION
TITLE OF INVENTION: ANTISENSE MODULATION OF INTEGRIN BETA 5 EXPRESSION
FILE REFERENCE: PTS-0024
CURRENT APPLICATION NUMBER: US/10/188,470
CURRENT FILING DATE: 2002-07-02
NUMBER OF SEQ ID NOS: 130
SEQ ID NO 128
LENGTH: 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ö
                                                                                                                                                                                                                                                                                                                          Query Match 0.3%; Score 15.2; DB 1; Length 20; Best Local Similarity 85.0%; Pred. No. 5.9e+02; Matches 17; Conservative 0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      0.3%; Score 15.2; DB 1; Length 20; 85.0%; Pred. No. 5.9e+02; ive 0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Query Match 0.3%; Score 15.2; DB 1; Length 20; Best Local Similarity 85.0%; Pred. No. 5.9e+02; Matches 17; Conservative 0; Mismatches 3; Indels
                                                                                                                                                                                                                                ; OTHER INFORMATION: Antisense Oligonucleotide
US-10-188-470-72
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Sequence 128, Application US/10188470 Publication No. US20040005707A1 GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                            739 CAGGATCCCACATTGCCTTT 758
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             739 CAGGATCCCACATTGCCTTT 758
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1 caddadcccacadreccrer 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           20 caggagcccacagraccrgr 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TYPE: DNA
CRGANISM: Chlamydia pneumoniae
US-10-289-762-4833
                                                                                                                                                                          TYPE: DNA
ORGANISM: Artificial Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Matches 17; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TYPE: DNA
ORGANISM: H. sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              US-10-289-762-4833
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               US-10-188-470-128
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          US-10-188-470-128
```

```
APPLICANT: YAMANTO, Shigeto
APPLICANT: YAMANOTO, Shigeto
APPLICANT: YAMANOTO, Sozo
APPLICANT: YAMANOTO, Kozo
APPLICANT: YAMANOTO, Kozo
APPLICANT: IXEGANI, Hakuo
TITLE OF INVENITION: Method for estimating therapeutic efficacy of tumor necrosis
TITLE OF INVENITION: Method for estimating therapeutic efficacy of tumor necrosis
TITLE OF INVENITION: Method for estimating thereselves: YANAI=3
CURRENT APPLICATION NUMBER: US/10/409,107A
CURRENT FILING DATE: 2002-04-09
NUMBER OF SEQ ID NOS: 100
SOFTWARE: Patentin version 3.2
SOFTWARE: Patentin version 3.2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ; OTHER INFORMATION: Oligonucleotide used as primer for PCR detection of SODD mRNA
US-10-409-107A-7
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Sequence 49, Application US/10409107A
PUblication No. US20040053288A1
GENERAL INFORMATION:
GENERAL INFORMATION:
APPLICANT: YAMAMOTO, Shigeto
APPLICANT: YAMAMOTO, Sozo
APPLICANT: YAMAMOTO, Sozo
APPLICANT: IKEGAMI, Hakuo
TITLE OF INVENTION: Method for estimating therapeutic efficacy of tumor necrosis
TITLE OF INVENTION: factor
FILE REFERENCE: YANAI=3
CURRENT APPLICATION NUMBER: US/10/409,107A
CURRENT APPLICATION NUMBER: JP 107126/2002
PRIOR FILING DATE: 2002-04-09
                                                                                                                                                                                                                           FEATURE:
; OTHER INFORMATION: FIN-C sequence. Amplifies a region coding for envelope gene.
US-10-436-458-15
                                                                                                                                                                                                                                                                                                                                                                               ô
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ö
                                                                                                                                                                                                                                                                                                                                                                               ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ö
                                                                                                                                                                                                                                                                                                                            0.3%; Score 15.2; DB 1; Length 20;
85.0%; Pred. No. 5.9e+02;
tive 0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Query Match

0.3%; Score 15.2; DB 1; Length 20;
Best Local Similarity 85.0%; Pred. No. 5.9e+02;
Matches 17; Conservative 0; Mismatches 3: Thatala
     PRIOR FILING DATE: 2000-11-10
PRIOR APPLICATION WUMBER: FR01/03970
PRIOR FILING DATE: 2001-03-23
NUMBER OF SEQ ID NOS: 27
SOFTWARE: Patentin version 3.1
SEQ ID NO 15
LENGTH: 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Sequence 7, Application US/10409107A Publication No. US20040053288A1 GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                             765 CTATAAACAAGAGCTGGAGG 784
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   375 ACAGCCCATCTCCTGTCTAT 394
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1 cratraacaacaacarccrcc 20
                                                                                                                                                                                TYPE: DNA ORGANISM: Artificial Sequence
                                                                                                                                                                                                                                                                                                                          Query Match 0.3'
Best Local Similarity 85.0
Matches 17; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TYPE: DNA ORGANISM: Artificial
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    US-10-409-107A-49
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            JS-10-409-107A-7
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            LENGTH: 20
                                                                                                                                                                                                                                                                                                                                                                                                                                ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    APPLICANT: Clavel, Francois
APPLICANT: Race, Esther
APPLICANT: Race, Esther
APPLICANT: Mammano, Fabrizzio
APPLICANT: Dam, Elisabeth
APPLICANT: Trouplin, Virginie
TITLE OF INVENTION: Method for Analysing Human Immunodeficiency Virus (HIV) Phenotypi
TITLE OF INVENTION: Characteristics
FILE REFERENCE: 60240.000002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ..
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                  Length 20,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              APPLICANT: James Karras
APPLICANT: James Karras
APPLICANT: Kenneth Dobie
TITLE OF INVENTION: ANTISENSE MODULATION OF MYD88 EXPRESSION
FILE REPERENCE: ANTISENSE: 105/10/673,063
CURRENT APPLICATION NUMBER: US/10/673,063
KUMBER OF SEQ ID NOS: 89
LENGTH: 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Score 15.2; DB 1;
Pred. No. 5.9e+02;
0; Mismatches 3;
                                                                                                                                                                                                                                                                                                                                                                                                                                               Score 15.2; DB 1;
Pred. No. 5.9e+02;
0; Mismatches 3;
                                                                                                                                                                                                                                                                                                                                                                          ; OTHER INFORMATION: Antisense Oligonucleotide
US-10-619-220-177
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 OTHER INFORMATION: Antisense Oligonucleotide
CURRENT APPLICATION NUMBER: US/10/619,220
CURRENT FILING DATE: 2003-07-14
PRIOR APPLICATION NUMBER: 09/802,669
PRIOR FILING DATE: 2001-03-01
PRIOR FILING DATE: 2000-09-18
PRIOR PILING DATE: 2000-09-18
PRIOR PILING DATE: 1999-04-12
NUMBER OF SEQ ID NOS: 180
SOFTWARE: Patentin Ver: 2.0
LENGTH: 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CURRENT APPLICATION NUMBER: US/10/436,458
CURRENT FILING DATE: 2003-05-13
PRIOR APPLICATION NUMBER: FR00/14495
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                3312 AAATAAAAACCAGTAATAC 3331
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         2395 TGGCAAAGCTCCTCAATTCT 2414
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            RESULT 729
US-10-436-458-15
Sequence 15, Application US/10436458
Sequence 15, Application US/10436458
Publication No. US20040053219A1
GENERAL INFORMATION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Sequence 34, Application US/10673063; Publication No. US20040038926A1; GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            rescharccrecreaniscr 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      O.3%;
Best Local Similarity 85.0%;
Matches 17; Conservative 0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TYPE: DNA
ORGANISM: Artificial Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                  0.3%;
                                                                                                                                                                                                                                                                                                   TYPE: DNA
ORGANISM: Artificial Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Best Local Similarity 85.0 Matches 17; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    US-10-673-063-34
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          US-10-673-063-34
                                                                                                                                                                                                                                                                                                                                                                                                                                                    Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         g
```

ઠ

ઠે

```
TYPE: DNA
ORGANISM: Artificial Sequence
FEATURE:
OTHER INFORMATION: Primer
FEATURE:
NAME/KEY: misc feature
LOCATION: (1). (20)
OTHER INFORMATION: Sequence FIN-C for the amplification of a region of gene of the
OTHER INFORMATION: envelope
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           US-10-303-566-70
US-10-303-566-70
Sequence 70, Application US/10303566
Sequence 70, Application US/10303566
Sequence 70, Application No. USC0040101852A1
SERNEAL INFORMATION:
APPLICANT: Nicholas M. Dean
APPLICANT: Kenneth W. Dobie
TITLE REFERENCE: HTS-0068
TITLE REFERENCE: HTS-0068
CURRENT APPLICATION NUMBER: US/10/303,566
CURRENT PILING DATE: 2002-11-21
NUMBER OF SEQ ID NOS: 79
LENGTH: 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Gequence 37, Application US/10303566
Publication No. US20040101852A1
GENERAL INFORMATION:
APPLICANT: C. Frank Bennett
APPLICANT: Nicholas M. Dean
APPLICANT: Kenneth W. Dobie
TITLE OF INVENTION: MODULATION OF CGG TRIPLET REPEAT BINDING PROTEIN 1 EXPRESSION
FILE REFERENCE: HTS-006
CURRENT FILING DATE: 2002-11-21
NUMBER OF SEQ ID NOS: 79
LENGTH: 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ö
                                                                                                                                                                                                                                                                                                                                                                                ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Gaps
                                                                                                                                                                                                                                                                                                                                                                                Gaps
                                                                                                                                                                                                                                                                                                                                                                                ..
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Length 20;
                                                                                                                                                                                                                                                                                                                                    Length 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Indels
                                                                                                                                                                                                                                                                                                                                                                                Indels
                                                                                                                                                                                                                                                                                                                             Query Match
0.3%; Score 15.2; DB 1;
Best Local Similarity 85.0%; Pred. No. 5.9e+02;
Matches 17; Conservative 0; Mismatches 3;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Query Match 0.3%; Score 15.2; DB 1; Best Local Similarity 85.0%; Pred. No. 5.9e+02; Matches 17; Conservative 0; Mismatches 3;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ; OTHER INFORMATION: Antisense Oligonucleotide US-10-303-566-37
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     4170 TGCAGCTGTTCAGGGCAACA 4189
                                                                                                                                                                                                                                                                                                                                                                                                                            765 CTATAAACAAGAGCTGGAGG 784
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1 CTATTAACAAGAGATGGTGG 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               recarcircricaerecaeca 1
                    SOFTWARE: PatentIn version 3.2
SEQ ID NO 15
LENGTH: 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TYPE: DNA ORGANISM: Artificial Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TYPE: DNA
ORGANISM: H. sapiens
  NUMBER OF SEQ ID NOS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            US-10-303-566-37/c
                                                                                                                                                                                                                                                                                          US-10-435-659-15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ; FEATURE:
US-10-303-566-70
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        g
                                                                                                                                                                                                                                                                                                                                                                                                                                 ŝ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  APPLICANT: Mammano, Fabrizio
APPLICANT: Race, Esther
APPLICANT: Race, Esther
APPLICANT: Race, Esther
APPLICANT: Dam, Eliabdet
APPLICANT: Dam, Eliabdet
TITLE OF INVENTION: Machod for analysis of the phenotypic characteristics of the
TITLE OF INVENTION: human immunodeficiency virus (HIV)
FILE REFERENCE: 60240.00005
CURRENT APPLICATION NUMBER: PCT/FR01/03512
PRIOR APPLICATION NUMBER: PCT/FR01/03512
PRIOR APPLICATION NUMBER: FR 00/14495
PRIOR PILING DATE: 2000-11-10
PRIOR PILING DATE: 2000-11-10
PRIOR APPLICATION NUMBER: FR 01/03970
PRIOR PILING DATE: 2001-03-23
PRIOR FILING DATE: 2001-03-23
PRIOR FILING DATE: 2001-03-27
PRIOR FILING DATE: 2001-03-27
                                                                                                                                    ; FEATURE:
; OTHER INFORMATION: Oligonucleotide used as primer for PCR detection of NF-?Bp50 mRNA
US-10-409-107A-49
                                                                                                                                                                                                                                                                        ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ö
                                                                                                                                                                                                                                                                        Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Gaps
                                                                                                                                                                                                                                                                        ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ö
                                                                                                                                                                                                                            20;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Length 20;
                                                                                                                                                                                                                                                                        3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     3; Indels
                                                                                                                                                                                                                            Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Match 0.3%; Score 15.2; DB 1; Local Similarity 85.0%; Pred. No. 5.9e+02; hes 17; Conservative 0; Mismatches 3;
                                                                                                                                                                                                                       Query Match
0.3%; Score 15.2; DB 1;
Best Local Similarity 85.0%; Pred. No. 5.9e+02;
Matches 17; Conservative 0; Mismatches 3;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    APPLICANT: Andrew T. Watt
TITLE OF INVENTION: MODILATION OF CD24 EXPRESSION
FILE REFERENCE: RTS-0178
CURRENT APPLICATION NUMBER: US/10/300,236
CURRENT FILING DATE: 2002-11-19
NUMBER OF SEQ ID NOS: 148
SEQ ID NO 17
LENGTH: 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ; OTHER INFORMATION: Antisense Oligonucleotide US-10-300-236-17
                                                                                                                                                                                                                                                                                                                 1497 GCAGCGTGGCAATGCCTTTC 1516
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Sequence 15, Application US/10435659; Publication No. US20040101828A1; GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Sequence 17, Application US/10300236; Publication No. US20040097448A1; GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              582 TGCTGGCATTGCTCCCTCCC 601
                                                                                                                                                                                                                                                                                                                                                         1 ściecka czarrectrirc 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      20 recreecacrecrecracec 1
NUMBER OF SEQ ID NOS: 100
SOFTWARE: Patentin version 3.2
SEQ ID NO 49
LENGTH: 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TYPE: DNA
ORGANISM: Artificial Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      APPLICANT: Bioalliance Pharma APPLICANT: INSERM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Clavel, Francois
                                                                                            TYPE: DNA ORGANISM: Artificial
                                                                                                                                                                                                                                                                                                                                                                                                                                 RESULT 732
US-10-300-236-17/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                US-10-435-659-15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Query Match
Best Local S
Matches 17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    APPLICANT:
                                                                                                                                                                                                                                                                                                                                                       셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 셤
```

g

```
Sequence 153, Application US/10476021

Publication No. US20040186069A1

GENERAL INFORMATION:

APPLICANT: C. Frank Bennett

APPLICANT: Andrew T. Watt

TILLE OF INVENTION: ANTISENSE MODULATION OF TUMOR NECROSIS FACTOR RECEPTOR 2 EXPRESSIC

TILLE REFREENCE: RTS-0216

CURRENT FILING DATE: 2003-10-24

PRIOR APPLICATION NUMBER: US/09/844,634

PRIOR APPLICATION NUMBER: US/09/844,634

PRIOR FILING DATE: 2001-04-27

NUMBER OF SEQ ID NOS: 174

LENGTH: 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Sequence 273, Application US/10712795
; Sequence 273, Application US/10712795
; Publication No. US20040214325A1
; GENERAL INFORMATION:
; APPLICANT: Crooke et al.;
; TITLE OF INVENTION: ANTISENSE MODULATION OF APOLIPOPROTEIN B EXPRESSION
; FILE REPERENCE: 30566/39562
; CURRENT APPLICATION NUMBER: US/10/712,795
; CURRENT FILING DATE: 2003-11-13
; PRIOR APPLICATION NUMBER: US 60/426,234
; PRIOR APPLICATION NUMBER: PCT/US03/15493
  APPLICANT: ROSANDE M. CTOOKE
APPLICANT: MATK J. GYBAHAM
TITLE OF INVENTION: MODULATION OF APOLIPOPROTEIN(A) EXPRESSION
FILE REFERENCE: ISPH.0595US.P1
CURRENT PAPLICATION NUMBER: US/10/684,440
CURRENT FILING DATE: 2003-10-15
PRIOR FILING DATE: 2003-10-15
PRIOR APPLICATION NUMBER: 60/923,515
PRIOR APPLICATION NUMBER: 60/475,402
PRIOR PILING DATE: 2003-06-02
NUMBER OF SEQ ID NOS: 73
SEQ ID NO 70
LENGTH: 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Length 20;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Indela
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          IndelB
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       0.3%; Score 15.2; DB 1;
85.0%; Pred. No. 5.9e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Query Match 0.3%; Score 15.2; DB 1; Best Local Similarity 85.0%; Pred. No. 5.9e+02; Matches 17; Conservative 0; Mismatches 3;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         , OTHER INFORMATION: Antisense Oligonucleotide US-10-476-021-153
                                                                                                                                                                                                                                                                                                                                                                                                             ) OTHER INFORMATION: Antisense Oligonucleotide US-10-684-440-70
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            3999 CACTTCCTTTGCTGTGGACA 4018
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             3193 CCTAAAGGGAGTGATCAGGA 3212
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1 crcrracrerecrereaca 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            20 ccraaagggrergreraagga 1
                                                                                                                                                                                                                                                                                                                                                             ORGANISM: Artificial Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TYPE: DNA
ORGANISM: Artificial Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Best Local Similarity 85.0 Matches 17, Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      RESULT 739
US-10-476-021-153/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Query Match
                                                                                                                                                                                                                                                                                                                                        TYPE: DNA
                                                                                                                                                                                                                                                                                                                                                                                        FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Sequence 9. Application US/10342311
Sequence 9. Application WS/10342311
GENERAL INFORMATION:
GENERAL INFORMATION:
TITLE OF INVENTION: Method of Screening for Inhibitors of Phospholipid Synthesis Rela
TITLE OF INVENTION: G1ycollpid-Storage Diseases
FILE REFERENCE: 85189-4200
CURRENT FILING DATE: 2003-01-15
CURRENT PILING DATE: 2003-01-15
NUMBER OF SEQ ID NOS: 12
SOFTWARE: Patentin version 3.1
                                                       ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ö
                                                                                                                                                                                                                         RESULT 736
US-10-318-389-79
is Sequence 79, Application US/10318389
is Sequence 79, Application Wol10318381
is General INFORMATION:
is APPLICANT: C. Frank Bennett
is APPLICANT: Kenneth W. Dobie
is TITLE OF INVENTION:
is PILE REFERENCE: PTS-0062
is CURRENT APPLICATION WINBER: US/10/318,389
is CURRENT FILING DATE: 2002-12-11
is NUMBER OF SEQ ID NOS: 134
is SEQ ID NO 79
is LENGTH: 20
                                                       ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ö
Query Match 0.3%; Score 15.2; DB 1; Length 20; Best Local Similarity 85.0%; Pred. No. 5.9e+02; Matches 17; Conservative 0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Query Match 0.3%; Score 15.2; DB 1; Length 20; Best Local Similarity 85.0%; Pred. No. 5.9e+02; Matches 17; Conservative 0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Query Match 0.3%; Score 15.2; DB 1; Length 20; Best Local Similarity 85.0%; Pred. No. 5.9e+02; Matches 17; Conservative 0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ; OTHER INFORMATION: Antisense Oligonucleotide
US-10-318-389-79
                                                                                                       4170 TGCAGCTGTTCAGGGCAACA 4189
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     3056 AAGTTGATCTTGTTAAAACC 3075
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1277 GAGCAATGGACATCTTTCA 1296
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ; Sequence 70, Application US/10684440; Publication No. US20040138164A1
                                                                                                                                                       1 recarcircricaerecaaca 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1 AAGTTGATCTTGATGAATC 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           20 GAGCAATGGTCAGTTTTTCA 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ORGANISM: Artificial Sequence
FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            OTHER INFORMATION: unknown
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TYPE: DNA
ORGANISM: artificial
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          US-10-342-311-9/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           RESULT 738
US-10-684-440-70
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       US-10-342-311-9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           SEQ ID NO 9
LENGTH: 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         8
```

ô

ò a

```
Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    US-10-719-370A-374/c

| Sequence 374, Application US/10719370A
| Sequence 374, Application US/10719370A
| Publication No. US20040220393A1
| GENERAL INFORMATION:
| APPLICANT: Ward, Donna T.
| APPLICANT: Marcuscon, Exic G.
| APPLICANT: Freier, Susan M.
| TITLE OF INVENTION: MODULATION OF HIFIA AND HIF2A EXPRESSION FILE REFERENCE: ISPT-1010
| CURRENT APPLICATION NUMBER: US/10/719,370A
| CURRENT APPLICATION NUMBER: US 10/304,126
| PRIOR PILING DATE: 2002-11-21
| PRIOR PILING DATE: 2002-11-23
| NUMBER OF SEQ ID NOS: 458
| SOFTWARE: Patentin version 3.2
| SEQ ID NO 374
| LENGTH: 20
| TURNENT APPLICATION NUMBER: US 10/304,126
| PRIOR PILING DATE: 2002-11-23
| NUMBER OF SEQ ID NOS: 458
| SEQ ID NO 374
                                    ö
                                                                                                                                                                                                                                                                                                                                              APPLICANT: Ward, Donna T.

APPLICANT: Ward, Donna T.

APPLICANT: Date: Kenneth W.

APPLICANT: Marcusson, Eric G.

APPLICANT: Freier, Susan M.

TITLE OF INVENTION: MODULATION OF HIFLA AND HIFZA EXPRESSION

FILE REFERENCE: ISPT-1010.

CURRENT APPLICATION NUMBER: US/10/719,370A

CURRENT FILING DATE: 2003-11-21

PRIOR APPLICATION NUMBER: US 10/304,126

SOFTWARE: Patentin version 3.2

LENGTH: 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  .
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         .
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Query Match 0.3%; Score 15.2; DB 1; Length 20; Best Local Similarity 85.0%; Pred. No. 5.9e+02; Matches 17; Conservative 0; Mismatches 3; Indels
                                    Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Indels
     Best Local Similarity 85.0%; Pred. No. 5.9e+02; Matches 17; Conservative 0; Mismatches 3;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Query Match 0.3%; Score 15.2; DB 1; Best Local Similarity 85.0%; Pred. No. 5.9e+02; Matches 17; Conservative 0; Mismatches 3;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ; OTHER INFORMATION: Oligonucleotide primer US-10-719-370A-262
                                                                                                                                                                                                                                                                      ; Sequence 262, Application US/10719370A; Publication No. US20040220393A1; GENERAL INFORMATION:
                                                                                   3999 CACTTCCTTTGCTGTGGACA 4018
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  326 GGACCACCGGGGTTCCTGAA 345
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           326 GGACCACCGGGGTTCCTGAA 345
                                                                                                                                     1 crcrracigicicicidada 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1 GGAGCACCTGGGTTCCTTAA 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ORGANISM: Artificial Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ORGANISM: Mus musculus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  US-10-719-370A-374
                                                                                                                                                                                                                                               US-10-719-370A-262
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TYPE: DNA
                                                                                   à
                                                                                                                                   엄
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       셤
                                                                                                                                                                                                                                                                                                                             ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  RESULT 741

US-10-712-795-639

US-10-712-795-639

Sequence 639, Application US/10712795

PUBLication No. US20040214325A1

GENERAL INFORMATION:

APPLICANT: Crooke et al.

TILE OF INVENTION: ANTISENSE MODULATION OF APOLIPOPROTEIN B EXPRESSION
FILE REFERENCE: 30566/39662

CURRENT PILING DATE: 2003-11-13

PRIOR APPLICATION NUMBER: US 60/426,234

PRIOR APPLICATION NUMBER: PCT/US03/15493

PRIOR FILING DATE: 2003-05-13

PRIOR FILING DATE: 2003-05-13

NUMBER OF SEQ ID NOS: 892

LENGTH: 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         RESULT 742

US-10-712-795-859

US-10-712-795-859

Sequence 859, Application US/10712795

Publication No. US20040214325A1

GENERAL INFORMATION:

TITLE OF INVENTION: ANTISENSE MODULATION OF APOLIPOPROTEIN B EXPRESSION

FILE REFERENCE: 30566/39662

CURRENT PILING DATE: 2003-11-13

PRIOR PILING DATE: 2003-11-13

PRIOR PILING DATE: 2003-11-13

PRIOR PILING DATE: 2003-11-13

PRIOR FILING DATE: 2003-11-13

NUMBER: PCT/US03/15493

NUMBER: PCT/US03/15493

SEQ ID NOS: 892
                                                                                                                                                                                                                                                                                                                             Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Gaps
                                                                                                                                                                                                                                                                                                                           ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ;
0
                                                                                                                                                                                                                                                                        Length 20;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          0.3%; Score 15.2; DB 1; Length 20;
85.0%; Pred. No. 5.9e+02;
ive 0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      0.3%; Score 15.2; DB 1; Length 20;
                                                                                                                                                                                                                                                                                                                           3; Indels
                                                                                                                                                                                                                                                                Query Match

0.3%; Score 15.2; DB 1;
Best Local Similarity 85.0%; Pred. No. 5.9e+02;
Matches 17; Conservative 0; Mismatches 3;
                                                                                                                                                                                  ; OTHER INFORMATION: Antisense Oligonucleotide US-10-712-795-273
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ; OTHER INFORMATION: Antisense Oligonucleotide US-10-712-795-859
                                                                                                                                                                                                                                                                                                                                                                          4014 GGACATCCACCAATGCTGGC 4033
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 4014 GGACATCCACCAATGCTGGC 4033
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      GGACCTGCACCAAAGCTGGC 20
                                                                                                                                                                                                                                                                                                                                                                                                                               20 GGACCTGCACCAAAGCTGGC 1
                                                                                                    TYPE: DNA
ORGANISM: Artificial Sequence
FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TYPE: DNA ORGANISM: Artificial Sequence
PRIOR FILING DATE: 2003-05-13
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Ouery Match 0.39
Best Local Similarity 85.09
Matches 17; Conservative
                      NUMBER OF SEQ ID NOS: 892
SEQ ID NO 273
LENGTH: 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ; TYPE: DNA; ORGANISM: H. sapiens
US-10-712-795-639
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Query Match
```

ò d

ö

```
Sequence 273, Application US/10920612

Publication No. US2005000908A1

GENERAL INFORMATION:

APPLICANT: Crooke al.

TITLE OF INVENTION: ANTISENSE MODULATION OF APOLIPOPROTEIN B EXPRESSION

FILE REFERENCE: 30566/39634A

CURRENT APPLICATION NUMBER: US/10/920,612

CURRENT PELLING DATE: 2004-08-17

PRIOR PELLING DATE: 2003-11-15

PRIOR PELLING DATE: 2003-11-13

PRIOR PLING DATE: 2003-11-13

PRIOR PLING DATE: 2003-11-13

PRIOR PLING DATE: 2002-11-13

SEQ ID NO 273

LENGTH: 20
                                                                                                                                                                                                                                                                                                                                                                                                                                             ; OTHER INFORMATION: Description of Artificial Sequence: Synthetic primer US-10-478-914-102
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Sequence 639, Application US/10920612
Fublication No. US205500908BA1
GENERAL INFORMATION:
APPLICANT: Crooke et al.
ITLE OF INVENTION: ANTISENSE MODULATION OF APOLIPOPROTEIN B EXPRESSION:
FILE REFERENCE: 30566/39634A
CURRENT APPLICATION NUMBER: 105/10/920,612
CURRENT FILING DATE: 2004-08-17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Query Match
0.3%; Score 15.2; DB 1; Length 20;
Best Local Similarity 85.0%; Pred. No. 5.9e+02;
Matches 17; Conservative 0; Mismatches 3· radel
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Query Match 0.3%; Score 15.2; DB 1; Length 20; Best Local Similarity 85.0%; Pred. No. 5.9e+02; Matches 17; Conservative 0; Mismatches 3; Indels
TITLE OF INVENTION: NUCLEIC ACIDS ISOLATED IN NEUROBLASTOMA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ; OTHER INFORMATION: Antisense Oligonucleotide US-10-920-612-273
                FILE REFERENCE: 7388-80899
CURRENT APPLICATION NUMBER: US/10/478,914
CURRENT FILING DATE: 2003-11-26
PRIOR APPLICATION NUMBER: PCT/JP02/05294
PRIOR APPLICATION NUMBER: PCT/JP02/05294
PRIOR FILING DATE: 2001-05-30
PRIOR APPLICATION NUMBER: UP 2001-255226
PRIOR APPLICATION NUMBER: UP 2001-255226
PRIOR FILING DATE: 2001-08-24
NUMBER OF SEQ ID NOS: 417
SOFTWARE: Patentin version 3.2
LENGTH: 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 4262 TITCTGAATTACAGCCTICT 4281
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         4014 GGACATCCACCAATGCTGGC 4033
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     20 rcrcrcaarracaccerrcr 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       20 geaccrecaccaaagcreec 1
                                                                                                                                                                                                                                                                                                                                                                   TYPE: DNA ORGANISM: Artificial Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ORGANISM: Artificial Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 RESULT 748
US-10-920-612-273/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  US-10-920-612-639
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      RESULT 749
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      RESULT 746

US-10-831-778-431/C

Sequence 431, Application US/10831778

Publication No. US20040235774A1

GENERAL INFORMATION:

APPLICANT: Bratzler, Robert L.

APPLICANT: Pouron, Yves

TITLE OF INVENTION: Immunostimulatory Nucleic Acids for the TITLE OF INVENTION: Tracement of Acthma and Allergy

FILE REFERENCE: C1037/7013 (HCL/MAT);

CURRENT APPLICATION NUMBER: US/10/831,778

CURRENT FILING DATE: 2004-04-23

FRIOR FILING DATE: 2000-02-03

NUMBER OF SEQ ID NOS: 1093

SEQ ID NO 431

LENGTH: 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Query Match 0.3%; Score 15.2; DB 1; Length 20; Best Local Similarity 85.0%; Pred. No. 5.9e+02; Matches 17; Conservative 0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Length 20;
                                                              Sequence 3, Application US/10839202
Publication No. US20040224342A1
GENERAL INFORMATION
APPLICANT: CONAKA, SATORU
APPLICANT: CONAKA, SATORU
TILE OF INVENTION: METHOD OF DETECTING MICROMETASTASIS
FILE REFERENCE: 252361USO
CURRENT APPLICATION NUMBER: US/10/839,202
CURRENT FILING DATE: 2004-05-06
PRIOR FILING DATE: 2004-05-06
PRIOR FILING DATE: 2003-129360
PRIOR FILING DATE: 2003-05-07
NUMBER OF SEQ ID NOS: 23
SOFTWARE: Patentin version 3.2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Query Match 0.3%; Score 15.2; DB 1; Best Local Similarity 85.0%; Pred. No. 5.9e+02; Matches 17; Conservative 0; Mismatches 3;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ) OTHER INFORMATION: synthetic oligonucleotide US-10-839-202-3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ; OTHER INFORMATION: Synthetic Sequence US-10-831-778-431
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 RESULT 747
US-10-478-914-102/c
US-10-478-914-102/c
; Sequence 102, Application US/10478914
; Publication No. US20040265812A1
; GENERAL INFORMATION:
; APPLICANT: NAKAGAWARA, AKIRA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   3699 AGTCAAGACGCTCACATTCT 3718
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           5050 AAAAAAAAAAAAACTCGA 5069
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     20 Agricaccaccarcacacrir 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            20 AAAAAAAAAAAAAACGACGA 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TYPE: DNA ORGANISM: Artificial Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ORGANISM: Artificial Sequence
                                           US-10-839-202-3/c
                                                                                                                                                                                                                                                                                                                                                                                                               SEQ ID NO 3
LENGTH: 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TYPE: DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          g
```

ö

ö

```
FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              8
                                                                                                                                                                                                                                                                                                         ઠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        US-10-920-612-859

US-10-920-612-859

Sequence 859, Application US/10920612

Publication No. US20050009088A1

GENERAL INFORMATION:

TITLE OF INVENTION: ANTISENSE MODULATION OF APOLIPOPROTEIN B EXPRESSION

TITLE OF INVENTION: ANTISENSE MODULATION OF APOLIPOPROTEIN B EXPRESSION

TITLE REPERENCE: 305-66/39634A

CURRENT FILING DATE: 2003-11-15

PRIOR PAPLICATION NUMBER: US/10/920,612

PRIOR PAPLICATION NUMBER: US 10/712,795

PRIOR PELING DATE: 2003-11-13

PRIOR PLING DATE: 2003-11-13

PRIOR PLING DATE: 2003-11-13

NUMBER OF SEQ ID NOS: 892

LENGTH: 20
                                                                                                                                                                                                                                                                                                                                                        ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Gaps
                                                                                                                                                                                                                                                                                                                                                          Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      gequence 597, Application US/10858500
; Publication No. US20050014257A1
; GENERAL INFORMATION
; APPLICANT: Rosanne M. Crooke
; APPLICANT: Rosanne M. Crooke
; APPLICANT: ROSANNE MOULATION OF C-REACTIVE PROTEIN EXPRESSION
; FILE REFERENCE: BIOLO0140 NUMBER: US/10/858,500
; CURRENT APPLICATION NUMBER: US/09/912,724
; PRIOR APPLICATION NUMBER: US 69/912,724
; PRIOR PILING DATE: 2001-07-25
; PRIOR PILING DATE: 2003-06-02
; PRIOR FILING DATE: 2003-0-1-28
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ;
0
                                                                                                                                                                                                                                                                                                                                                          ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Length 20;
                                                                                                                                                                                                                                                                                                         Length 20;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Indels
                                                                                                                                                                                                                                                                                                                                                          3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Query Match
0.3%; Score 15.2; DB 1;
Best Local Similarity 85.0%; Pred. No. 5.9e+02;
Matches 17; Conservative 0; Mismatches 3;
                                                                                                                                                                                                                                                                                                           1) Score 15.2; DB 1; ilarity 85.0%; Pred. No. 5.9e+02; Conservative 0; Mismatches 3;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ; OTHER INFORMATION: Antisense Oligonucleotide
US-10-920-612-859
PRIOR APPLICATION NUMBER: PCT/US03/15493
PRIOR FILING DATE: 2003-11-15
PRIOR PILING DATE: 2003-11-13
PRIOR PILING DATE: 2003-11-13
PRIOR PILING DATE: 2003-11-13
PRIOR APPLICATION NUMBER: US 60/426, 234
PRIOR PILING DATE: 2002-11-13
NUMBER OF SEQ ID NOS: 892
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    3999 CACTTCCTTTGCTGGACA 4018
                                                                                                                                                                                                                                                                                                                                                                                                          4014 GGACATCCACCAATGCTGGC 4033
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1 Crcrracrereredeaca 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                      1 geaccrecaccaaagcreec 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TYPE: DNA
ORGANISM: Artificial Sequence
                                                                                                                                                                                                                       ; TYPE: DNA; ORGANISM: H. Bapiens
US-10-920-612-639
                                                                                                                                                                                                                                                                                                                   Query Match
Best Local Similarity
Matches 17; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           RESULT 751
US-10-858-500-597
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ò
```

```
ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ö
                                                                                                                                                                          ô
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   US-10-639-300-29
; Sequence 29, Application US/10639300
; Sequence 29, Application US/10639300
; GENERAL INFORMATION:
; APPLICANT: Vickie L. Brown-Driver
; APPLICANT: Vickie L. Brown-Driver
; APPLICANT: Vickie L. Brown-Driver
; TITLE OF INVENTION: ANTISENSE MODULATION OF BREAST CANCER-1 EXPRESSION
; FILE REPERENCE: PTS-0017
; CURRENT FILING DATE: 2003-08-12;
; RIOR APPLICATION NUMBER: US/10/639,676
; PRIOR FILING DATE: 2002-07-18
; SEQ ID NOS: 84
; SEQ ID NO 29
LENGTH: 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Gaps
                                                                                                                                                                            Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ö
                                                                                                                                                                            ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Length 20;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 0.3%; Score 15.2; DB 1; Length 20; 85.0%; Pred. No. 5.9e+02;
                                                                                                                                          Length 20;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Indels
                                                                                                                                                                            Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Query Match
0.3%; Score 15.2; DB 1;
Best Local Similarity 85.0%; Pred. No. 5.9e+02;
Matches 17; Conservative 0; Mismatches 3;
                                                                                                                                          Query Match
0.3%; Score 15.2; DB 1;
Best Local Similarity 85.0%; Pred. No. 5.9e+02;
Matches 17; Conservative 0; Mismatches 3;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CTHER INFORMATION: Antisense Oligonucleotide US-10-639-300-29
                                                                                     , OTHER INFORMATION: Antisense Oligonucleotide US-10-858-500-597
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   0; Mismatches
                                                                                                                                                                                                              3999 CACTICCTTIGCTGTGGACA 4018
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   853 GAGAAAGCAGCTATGCTCTT 872
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1 crcrracrerecreredada 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TYPE: DNA ORGANISM: Artificial Sequence
                                                   TYPE: DNA
ORGANISM: Artificial Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Query Match
Best Local Similarity 85.03
Matches 17; Conservative
NUMBER OF SEQ ID NOS: 627
SEQ ID NO 597
LENGTH: 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TYPE: DNA
ORGANISM: H. sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             US-10-639-300-65
```

```
Sequence 396, Application US/10773678

Sequence 306, Application US/10773678

Publication No. US20050074879A1

GENERAL INFORMATION:

APPLICANT: Karras, James G

TITLE OF INVENTION: Expression

FILE OF INVENTION: Expression

FILE REFERENCE: ISPH-0828

CURRENT APPLICATION UNMBER: US/10/773,678

CURRENT FILING DATE: 2003-11-14

PRIOR APPLICATION NUMBER: 10/713,139

PRIOR FILING DATE: 2001-01-1

PRIOR FILING DATE: 2000-01-1

PRIOR FILING DATE: 2000-04-06

PRIOR FILING DATE: 1999-04-08

NUMBER OF SEQ ID NOS: 402

SOFTWARE: PatentIN Ver. 2.1

SEQ ID NO 396
GENERAL INCULARIA AKIRA

APPLICANT: NAKAGAWARA AKIRA

TITLE OF INVENTION: NUCLEIC ACIDS ISOLATED FROM NEUROBLASTOMA
FILE REFERENCE: 7388-80893
CURRENT APPLICATION NUMBER: US/10/479,081
CURRENT FILING DATE: 2003-311-26
PRIOR PLLING DATE: 2003-311-26
PRIOR PLLING DATE: 2001-16366
PRIOR PLLING DATE: 2001-05-31
PRIOR PLLING DATE: 2001-05-31
PRIOR FILING DATE: 2001-06-31
PRIOR PLLING DATE: 2001-08-24
NUMBER OF SEQ ID NOS: 742
SOFTWARE: Patentin version 3.2
LENGTH: 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                         Length 20;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Length 20;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                     Score 15.2; DB 1;
Pred. No. 5.9e+02;
0; Mismatches 3;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Query Match 0.3%; Score 15.2; DB 1;
Best Local Similarity 85.0%; Pred. No. 5.9e+02;
Matches 17; Conservative 0; Mismatches 3;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ; OTHER INFORMATION: Antisense oligonucleotide US-10-773-678-396
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         4262 TTTCTGAATTACAGCCTTCT 4281
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                3999 CACTTCCTTTGCTGGACA 4018
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  RESULT 757
US-10-991-147-81
Sequence 81, Application US/10991147
Publication No. US20050096292A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1 crcrraciereciereses 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 20 TCTCTGAATTACACCGTTCT 1
                                                                                                                                                                                                                                                                                                                                                   ORGANISM: Artificial Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                       Query Match
Best Local Similarity 85.0%;
Matches 17; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ORGANISM: Artificial Sequence
                                                                                                                                                                                                                                                                                                                                                                                      ; OTHER INFORMATION: Primer US-10-479-081-399
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 US-10-773-678-396
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TYPE: DNA
                                                                                                                                                                                                                                                                                                                                                                      FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ö
                                                                                                                                                                                                                                                                                                                                                                                   CORRESPONDENCE ADDRESS:
ADDRESSEE: Records Manager, Legal Department, Hewlett-Packard
Company M/S 20BO
STREET: 3000 Hanover Street
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           0; . Gaps
                                                                                                                                               0.3%; Score 15.2; DB 1; Length 20; 85.0%; Pred. No. 5.9e+02; tive 0; Mismatches 3; Indel8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               COMPUTER READABLE FORM:

MEDIUM TYPE: Floppy disk

COMPUTER: IN PC Compatible

COMPUTER: IN PC Compatible

OPERATING SYSTEM: PC-DOS/MS-DOS

SOFTWARE: Patentin Release #1.0, Version #1.30

CURRENT APPLICATION DATA:

APPLICATION NUMBER: US/10/877,231

FILING DATE: 24-Jun-2004

CLASSIFICATION: Not available

PRIOR APPLICATION: Not available

FILING DATE: 15-PED-2001

FILING DATE: 10-PEB-1998

ATTORNEY/AGENT INFORMATION:

NAMEL CALL MOCRATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       NAME: Choi, Wendy A.
REGISTRATION NUMBER: 36,697
REFERENCE/DOCKET NUMBER: 10971464-1
TELECOMUNICATION INFORMATION:
TELEPHONE: 650-236-2366
TELEPHONE: 650-852-8063
INFORMATION FOR SEQ ID NO: 549:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ANTI-SENSE: NO
SEQUENCE DESCRIPTION: SEQ ID NO: 549:
US-10-877-231-549
                                                                                                                                                                                                                                                                                                                                                   probe sequences NUMBER OF SEQUENCES: 1165
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                3311 AAAATAAAAACCAGTAATA 3330
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Sequence 399, Application US/10479081
Publication No. US20050059001A1
             853 GAGAAAGCAGCTATGCTCTT 872
                                                    20 GGGAAACCAGCTATTCTCTT 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AAAAGAAAAATCAGTAACA 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            LENGTH: 20 base pairs
TYPE: nucleic acid
STRANDEDNESS: single
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             SEQUENCE CHARACTERISTICS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TOPOLOGY: linear
MOLECULE TYPE: cDNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Query Match
Best Local Similarity 85.0°
Matches 17; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CITY: Palo Alto
STATE: CA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    COUNTRY: USA
                                                                                                                                  US-10-877-231-549/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  RESULT 755
US-10-479-081-399/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     20
                                           g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     셤
             ઠે
```

ô

**Gaps** 

ö

ö

Gapa

```
Kristin Sannes
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ORGANISM: Artificial Sequence FEATURE:
                         Swayze, Eric
Baker, Brenda F.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              q
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              o;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Sequence 138, Application US/10991147

Sequence 138, Application US/10991147

Publication No. US200509522A1

GENERAL INFORMATION:

APPLICANT: Susan M. Freier

APPLICANT: Kenneth W. Dobie

APPLICANT: Erich Koller

TITLE OF INVENTION: NOTCH1 INHIBITORS FOR INDUCING APOPTOSIS

FILE REPERENCE: ISPH-0729

CURRENT APPLICATION NUMBER: US/10/991,147

CURRENT FILING DATE: 2004-11-17

PRIOR PELING DATE: 2003-01-21

PRIOR APPLICATION NUMBER: 10/160,497

PRIOR APPLICATION NUMBER: 10/160,497

PRIOR APPLICATION NUMBER: 10/160,497

NUMBER OF SEQ ID NOS: 146

SEQ ID NO 138

LENGTH: 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ö
                       APPLICANT: Sugan M. Freier
APPLICANT: Sugan M. Freier
APPLICANT: Schneth W. Dobie
APPLICANT: Ext. Coller
TITLE OF INVENTION: NOTCH: INHIBITORS FOR INDUCING APOPTOSIS
FILE REFERENCE: ISPH-0729
CURRENT FILING DATE: 2004-11-17
PRIOR APPLICATION NUMBER: US/10/991,147
PRIOR APPLICATION NUMBER: US/10/914,750
PRIOR APPLICATION NUMBER: 10/160,497
PRIOR FILING DATE: 2002-02-20
PRIOR FILING DATE: 2002-02-20
PRIOR FILING DATE: 2002-02-20
SEQ ID NO 81
LENGTH: 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Query Match 0.3%; Score 15.2; DB 1; Length 20; Best Local Similarity 85.0%; Pred. No. 5.9e+02; Matches 17; Conservative 0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Query Match 0.3%; Score 15.2; DB 1; Length 20; Best Local Similarity 85.0%; Pred. No. 5.9e+02; Matches 17; Conservative 0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                               , OTHER INFORMATION: Antisense Oligonucleotide US-10-991-147-81
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Sequence 1494, Application US/10831901A
Publication No. US20050100885A1
GENERAL INFORMATION:
APPLICANT: Crooke, Stanley T.
APPLICANT: Beker, David J.
APPLICANT: Sampath, Rangarajan
APPLICANT: Preier, Susan M.
APPLICANT: Massire, Christian
APPLICANT: Hofstadler, Steven A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 47 TGCTGGGCTGCAGCTG 66
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     47 TGCTGGGCTGCAGCAGCTG 66
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1 recreecrerecaccaerie 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                20 recredercrecaccadere 1
                                                                                                                                                                                                                                                                                                                                                                                   TYPE: DNA
ORGANISM: Artificial Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ; TYPE: DNA; ORGANISM: H. sapiens
US-10-991-147-138
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                US-10-831-901A-1494/c
                  GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               RESULT 758
US-10-991-147-138/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   임
```

```
REBUIT 760
US-10-831-901A-1495/c
Sequence 1455, Application US/10831901A
FULLOANT CROOKE, StanLey T.
APPLICANT CROOKE, StanLey T.
APPLICANT Sampeth, Rangarajan
APPLICANT Freier, Susan M.
APPLICANT Freier, Susan M.
APPLICANT Hofstadler, Steven A.
APPLICANT BAKET, Bridge B.
APPLICANT HOFSTAGE, Bridge F.
APPLICANT BAKET, Bridge B.
APPLICANT BAKET, Bridge B.
APPLICANT BAKET, SWARE, B.
APPLICANT BAKET, SWARE, SOLOHOUSE, STERMER, FILTE OF INVENTION: Compositions And Methods For The Treatment of Severe TITLE OF INVENTION: Acute Respiratory Syndrome (SARS)
FILE REFERENCE: ISISO083-100 (BIOL000818)
CURRENT APPLICATION NUMBER: 60/466,426
PRIOR FILING DATE: 2003-04-36
PRIOR FILING DATE: 2003-04-30
PRIOR FILING DATE: 2003-05-06
PRIOR FILING DATE: 2003-05-06
PRIOR FILING DATE: 2003-06-10
PRIOR FILING DATE: 2003-06-10
PRIOR FILING DATE: 2003-06-27
APPLICANT: Benert, C. Frank,
APPLICANT: Benert, C. Frank,
ITILE OF INVENTION: Compositions And Methods For The Treatment Of Severe
ITILE OF INVENTION: Acute Respiratory Syndrome (SARS)
FILE REPERENCE: ISISO083-100 (BIOLOGOBUS)
CURRENT APPLICATION NUMBER: US/10/831,901A
CURRENT FILING DATE: 2004-04-26
PRIOR PLING DATE: 2003-04-28
PRIOR FILING DATE: 2003-04-28
PRIOR FILING DATE: 2003-04-30
PRIOR PILING DATE: 2003-04-30
PRIOR PRILING DATE: 2003-04-30
PRIOR PRILING DATE: 2003-04-30
PRIOR PILING DATE: 2003-04-30
PRIOR PILING DATE: 2003-06-10
PRIOR PILING DATE: 2003-06-10
PRIOR PILING DATE: 2003-06-10
PRIOR PILING DATE: 2003-06-10
PRIOR FILING DATE: 2003-06-10
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Query Match 0.3%; Score 15.2; DB 1; Length 20; Best Local Similarity 85.0%; Pred. No. 5.9e+02; Matches 17; Conservative 0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ; OTHER INFORMATION: Antisense compound US-10-831-901A-1494
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            2375 GIGITGCIGCCIAIGITGGC 2394
```

```
APPLICANT:
APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             APPLICANT: Ecker, David J.
APPLICANT: Ecker, David J.
APPLICANT: Sampath, Rangarajan
APPLICANT: Sampath, Rangarajan
APPLICANT: Freier, Suean M.
APPLICANT: Hofstadler, Steven A.
APPLICANT: Hofstadler, Steven A.
APPLICANT: Hofstadler, Steven A.
APPLICANT: Baker, Brenda F.
APPLICANT: Baker F.
APPLICANT: Bake
                                                                                                                                                                                                                                                                                                                                                                                                                                    ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                    ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ö
                                                                                                                                                                                                                                                                                                                                            Query Match 0.3%; Score 15.2; DB 1; Length 20; Best Local Similarity 85.0%; Pred. No. 5.9e+02; Matches 17; Conservative 0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Query Match 0.3%; Score 15.2; DB 1; Length 20; Best Local Similarity 85.0%; Pred. No. 5.9e+02; Matches 17; Conservative 0; Mismatches 3; Indels
SOFTWARE: FastSEQ for Windows Version 4.0 SEQ ID NO 1495
LENGTH: 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sequence 1496, Application US/10811901A
Publication No. US20050100865A1
GENERAL INFORMATION:
APPLICANT: Crooke, Stanley T.
APPLICANT: Sampath, Rangarajan
APPLICANT: Sampath, Rangarajan
APPLICANT: Massire, Christian
APPLICANT: Hofstadler, Steven A.
APPLICANT: Lowery, Kristin Sannes
APPLICANT: Lowery Kristin Sannes
APPLICANT: Baker, Brenda F.
                                                                                                                                                                                                                            OTHER INFORMATION: Antisense compound US-10-831-901A-1495
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ; OTHER INFORMATION: Antisense compound US-10-831-901A-1496
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    2376 TGTTGCTGCCTATGTTGGCT 2395
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   2377 GITGCTGCCIAIGTTGGCTG 2396
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            20 rererriecciaricirieci 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       20 Grerrrecciarerrecte 1
                                                                                                                TYPE: DNA
ORGANISM: Artificial Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TYPE: DNA
ORGANISM: Artificial Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             RESULT 761
US-10-831-901A-1496/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            RESULT 762
US-10-831-901A-1501/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               SEQ ID NO 1496
                                                                                                                                                                                        FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ద
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ò
```

; Sequence 1501, Application US/10831901A ; Publication No. US20050100885A1

```
APPLICANT: Sumpart, ransylatalan.
APPLICANT: Bampart, Christian
APPLICANT: Massire, Christian
APPLICANT: Hofstadlar, Steven A.
APPLICANT: Hofstadlar, Steven A.
APPLICANT: Hofstadlar, Steven A.
APPLICANT: Bayze, Eric
APPLICANT: Swayze, Eric
APPLICANT: Swayze, Eric
APPLICANT: Barker, Brenda F.
APPLICANT: Ba
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     APPLICANT: Bennett, C. Frank
TITLE OF INVENTION: Compositions And Methods For The Treatment Of Severe
TITLE OF INVENTION: Acute Respiratory Syndrome (SARS)
FILE REFERENCE: ISISOOBA:100 (BIOLO008US)
CURRENT APPLICATION NUMBER: 2014/0/831,901A
CURRENT FILING DATE: 2004-04-26
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Gape
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Length 20;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Indele
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Query Match 0.3%; Score 15.2; DB 1; Best Local Similarity 85.0%; Pred. No. 5.9e+02; Matches 17; Conservative 0; Mismatches 3;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ; OTHER INFORMATION: Antisense compound US-10-831-901A-1501
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Sequence 3731, Application US/10831901A Publication No. US20050100885A1 GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CURRENT FILING DATE: 2004-04-26
PRIOR PAPLICATION NUMBER: 60/466,426
PRIOR FILING DATE: 2003-04-28
PRIOR APPLICATION NUMBER: 60/468,562
PRIOR FILING DATE: 2003-05-06
PRIOR APPLICATION NUMBER: 60/467,770
PRIOR FILING DATE: 2003-04-30
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        APPLICANT: Crooke, Stanley T.
APPLICANT: Ecker, David J.
APPLICANT: Sampath, Rangarajan
APPLICANT: Freier, Susan M.
APPLICANT: Massire, Christian
APPLICANT: Hofstadler, Steven A.
APPLICANT: Lowery, Kristin Sannes
APPLICANT: Swayze, Eric
APPLICANT: Swayze, Eric
APPLICANT: Baker, Brenda F.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   2382 TGCCTATGTTGGCTGGCAAA 2401
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       20 recerarerrescrara 1
Crooke, Stanley T.
Ecker, David J.
Sampath, Rangarajan
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ORGANISM: Artificial Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               US-10-831-901A-3731/c
```

```
20 TCAATGACAAAGCTCTTTAT 1
                                                                                                                                                                                                                                                             GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     US-10-81J-901A-3732/C

18-30-91-901A-3732/C

18-30-91-901A-3732/C

18-30-91-901A-3732/C

18-30-91B-901A-3732/C

18-30-91B-901A-3732/C

18-30-91B-901A-3732/C

18-30-91B-901A-3732/C

18-30-91B-901A-3732/C

18-30-91B-901A-3732/C

18-30-91B-901A-3732/C

18-30-91B-901A-370-S

18-30-91B-901A-370-S

18-30-91B-901A-370-S

18-30-91B-901A-370-S

18-30-91B-901A-370-S

18-30-91B-901A-370-S

18-30-91B-901A-370-S

18-30-91B-901A-370-S

18-30-91B-901A-38-S

18-30-901B-901A-38-S

1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ÷
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ô
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Query Match 0.3%; Score 15.2; DB 1; Length 20; Best Local Similarity 85.0%; Pred. No. 5.9e+02; Matches 17; Conservative 0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Query Match

0.3%; Score 15.2; DB 1; Length 20;
Best Local Similarity 85.0%; Pred. No. 5.9e+02;
Matches 17; Conservative 0; Mismatches 3; Indels
PRIOR APPLICATION NUMBER: 60/468,627
PRIOR FILING DATE: 2003-05-06
PRIOR APPLICATION NUMBER: 60/477,637
PRIOR PILING DATE: 2003-06-10
PRIOR PILING DATE: 2003-06-10
PRIOR FILING DATE: 2003-06-27
NUMBER OF SEQ ID NOS: 30063
SOFTWARE: FeatSEQ for Windows Version 4.0
SEQ ID NO 3731
LENGTH: 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ; OTHER INFORMATION: Antisense compound US-10-831-901A-3732
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      OTHER INFORMATION: Antisense compound
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        2458 GTCATTGTGAAAGCTCTTTA 2477
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Grcaargacaaagcrcrrra 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TYPE: DNA
ORGANISM: Artificial Sequence
                                                                                                                                                                                                                                                                                                                                                                                                          TYPE: DNA ORGANISM: Artificial Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           US-10-831-901A-3731
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ઠ
```

2459 TCATTGTGAAAGCTCTTTAT 2478

8

Сарв

```
APPLICANT: Crooke, Stanley T.
APPLICANT: Sampath, Rangarajan
APPLICANT: Sampath, Rangarajan
APPLICANT: Freier, Susan M.
APPLICANT: Massire, Christian
APPLICANT: Hofstaller, Steven A.
APPLICANT: Hofstaller, Steven A.
APPLICANT: Lowery, Kristin Sannes
APPLICANT: Lowery, Kristin Sannes
APPLICANT: Baker, Bried
APPLICANT: Bennett, C. Franch
APPLICANT: Baker, C. Franch
APPLICANT: Bennett, C. Franch
APPLICANT: Bennett, C. Franch
APPLICANT: Massire Compositions And Methods For The Treatment Of Severe
TITLE OF INVENTION: Compositions And Methods
TITLE OF INVENTION: Acute Respiratory Syndrome (SARS)
FILE REPERBENCE: ISISO083-100 (BIOLO0008US)
CURRENT APPLICATION NUMBER: US/10/831,901A
CURRENT APPLICATION NUMBER: US/0466,426
                                                                                               ó
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ö
                                     Length 20;
                                                                                               Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Indele
                                     Query Match 0.3%; Score 15.2; DB 1; Best Local Similarity 85.0%; Pred. No. 5.9e+02; Matches 17; Conservative 0; Mismatches 3;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Query Match 0.3%; Score 15.2; DB 1; Best Local Similarity 85.0%; Pred. No. 5.9e+02; Matches 17; Conservative 0; Mismatches 3;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        FRIDK PILING DATE: 2003-04-28

PRIOR FILING DATE: 2003-04-28

PRIOR PILING DATE: 2003-05-06

PRIOR PILING DATE: 2003-06-06

PRIOR PILING DATE: 2003-04-30

PRIOR PILING DATE: 2003-04-30

PRIOR PILING DATE: 2003-05-06

PRIOR FILING DATE: 2003-05-06

PRIOR FILING DATE: 2003-06-10

PRIOR FILING DATE: 2003-06-10

PRIOR FILING DATE: 2003-06-27

NUMBER OF SEQ ID NOS: 30063

SOFTWARE: PABLESEQ for Windows Version 4.0

SERIOR TOTALS
                                                                                                                                                                                                                                                                                                                                    US-10-831-901A-15730/c
; Sequence 15730, Application US/10831901A
; Publication No. US20050100885A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Sequence 20883, Application US/10831901A
Publication No. US20050100885A1
GENERAL INFORMATION:
APPLICANT: Crooke, Stanley T.
APPLICANT: Sampath, Rangarajan
APPLICANT: Prejer, Sugan M.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        , OTHER INFORMATION: Antisense compound US-10-831-901A-15730
                                                                                                                                                       2994 TCTTCATGATAGTAGTCAGA 3013
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       4731 CITAATITICAAAATTAIGT 4750
                                                                                                                                                                                                                 1 rcrrcargrregraerraga 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Massire, Christian
Hofstadler, Steven A.
Lowery, Kristin Sannes
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  20 CTTTATTATCAAATAATGT 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TYPE: DNA ORGANISM: Artificial Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                    GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        RESULT 769
US-10-831-901A-20883/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           APPLICANT
                                                                                                                                                             ઠે
                                                                                                                                                                                                           셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ŝ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              APPLICANT: Ecker, David J.

APPLICANT: Sampath, Rangarajan
APPLICANT: Sampath, Rangarajan
APPLICANT: Sampath, Rangarajan
APPLICANT: Massire, Christian
APPLICANT: Hofstadler, Steven A.
APPLICANT: Hofstadler, Steven A.
APPLICANT: Baxer, Kristin Sannes
APPLICANT: Baxer, Brenda F.
APPLICANT: Benett, C. Frank
ITILE OF INVENTION: Compositions And Methods For The Treatment Of Severe
ITILE OF INVENTION: Acute Respiratory Syndrome (SARS)
ITILE OF INVENTION: Acute Respiratory Syndrome (SARS)
ITILE OF INVENTION: Acute Respiratory Syndrome (SARS)
ITILE OF INVENTION NUMBER: 60/464,26
FILE REPERENCE: ISISO083-100 (BIOL0008US)
CURRENT FILING DATE: 2003-04-28
FRIOR APPLICATION NUMBER: 60/466,426
FRIOR PILING DATE: 2003-05-06
FRIOR FILING DATE: 2003-05-06
FRIOR FILING DATE: 2003-06-10
FRIOR FILING DATE: 2003-06-27
FRIOR FILING DATE: 2003-06-27
FRIOR FILING DATE: 2003-06-27
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          0.3%; Score 15.2; DB 1; Length 20; 85.0%; Pred. No. 5.9e+02; tive 0; Mismatches 3; Indels
                                                 FRIOR PILING DATE: 2003-04-28

PRIOR PLING DATE: 2003-04-28

PRIOR PLING DATE: 2003-05-06

PRIOR PLING DATE: 2003-05-06

PRIOR APPLICATION NUMBER: 60/469,770

PRIOR PILING DATE: 2003-04-30

PRIOR PILING DATE: 2003-04-30

PRIOR PILING DATE: 2003-05-06

PRIOR PILING DATE: 2003-05-06

PRIOR FILING DATE: 2003-06-10

PRIOR FILING DATE: 2003-06-10

PRIOR FILING DATE: 2003-06-10

PRIOR PILING DATE: 2003-06-37

NUMBER OF SEQ ID NOS: 30063

SOFTWARE: PRESEQ FOR WINDOWS VERSION 4.0

SERICHH: 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        NUMBER OF SEQ ID NOS: 30063
SOFTWARE: PastSEQ for Windows Version 4.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Sequence 13606, Application US/10831901A; Publication No. US20050100885A1; GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CTHER INFORMATION: Antisense compound US-10-831-901A-5057
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              OTHER INFORMATION: Antisense compound US-10-831-901A-13606
VT FILING DATE: 2004-04-26
APPLICATION NUMBER: 60/466,426
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            4495 GTAGGACCAAGTGATGACAC 4514
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          20 GTACTACCTAGTGATGACAC 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TYPE: DNA
ORGANISM: Artificial Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TYPE: DNA
ORGANISM: Artificial Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  APPLICANT: Crooke, Stanley T.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Query Match 0.33
Best Local Similarity 85.03
Matches 17, Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   SEQ ID NO 13606
LENGTH: 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ઠે
```

ö

Gapa

Gaps

; 0

Indels

```
0.3%; Score 15.2; DB 1; Length 20;
85.0%; Pred. No. 5.9e+02;
                                                                                                                                                                                                                                                                                                                                                                      0; Mismatches
                                                                                                                                                                                 OTHER INFORMATION: Antisense compound
                                                                                                                                                                                                                                                                                                                                                                                                                                               4913 AATGAATATGTTTATTTTGT 4932
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 20 AACGAACATGTTTATTTTTT 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ORGANISM: Artificial Sequence
                                                                                                                                                                                                                                                                                             Query Match
Best Local Similarity 85.03
Matches 17; Conservative
                                                                         TYPE: DNA ORGANISM: Artificial
                                                                                                                                                                                                                    US-10-831-901A-21489
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       JS-10-831-901A-21493
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     RESULT 772
US-10-831-901A-22366
SEQ ID NO 21489
                                                                                                                                          FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                   ठ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 셤
                   APPLICANT: Baker, Brenda F.

APPLICANT: Baker, Brenda F.

APPLICANT: Bennett, C. Frank
TITLE OF INVENTION: Compositions And Methods For The Treatment of Severe
TITLE OF INVENTION: Acute Respiratory Syndrome (SARS)
FILE REFERENCE: ISISO083-100 (BIOLO008US)
CURRENT APPLICATION NUMBER: US/10/831,901A
CURRENT FILING DATE: 2004-04-26
FRIOR PILING DATE: 2003-06-426
FRIOR PILING DATE: 2003-06-66
FRIOR PILING DATE: 2003-06-66
FRIOR PILING DATE: 2003-06-66
FRIOR PILING DATE: 2003-06-10
FRIOR PILING DATE: 2003-06-27
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  GENERAL INCOMATION:
GENERAL INCOMATION:
GENERAL INCOMATION:
GENERAL INCOMATION:
APPLICANT: Ecker, David J.
APPLICANT: Ecker, David J.
APPLICANT: Esmpath, Rangarajan
APPLICANT: Freier, Susan M.
APPLICANT: Freier, Steven A.
APPLICANT: Baker, Brenda F.
APPLICANT: Lowery, Kristin Sannes
APPLICANT: Baker, Brenda F.
APPLICANT: Baker, Brenda F.
APPLICANT: Baker, Brenda F.
APPLICANT: Baker, Brenda F.
APPLICANT: Baker, Steven A.
APPLICANT: Bennett, C. Frank
TITLE OF INVENTION: Compositions And Methods For The Treatment Of Severe
TITLE OF INVENTION: Acute Respiratory Syndrome (SARS)
TITLE OF INVENTION: Acute Respiratory Syndrome (SARS)
CURRENT FILING DATE: 2003-04-26
PRIOR FILING DATE: 2003-04-26
PRIOR FILING DATE: 2003-05-06
PRIOR FILING DATE: 2003-05-06
PRIOR FILING DATE: 2003-06-10
PRIOR FILING DATE: 2003-06-10
PRIOR FILING DATE: 2003-06-27
NUMBER OF SEO TH MAS. 2003-06-27
NUMBER OF SEO TH MAS. 2006-27
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ó,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               / Match 0.3%; Score 15.2; DB 1; Length 20; Local Similarity 85.0%; Pred. No. 5.9e+02; les 17; Conservative 0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             NUMBER OF SEQ ID NOS: 30063
SOFTWARE: FastSEQ for Windows Version 4.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          US-10-831-901A-21489/c
; Sequence 21489, Application US/10831901A
; Publication No. US20050100885A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ; OTHER INFORMATION: Antisense compound US-10-831-901A-20883
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              627 TTCAGATATTCATGACTTTG 646
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       20 rrcagarcrraargacrrcg 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TYPE: DNA ORGANISM: Artificial Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  SEQ ID NO 20883
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         LENGTH
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ઠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    쉽
```

```
APPLICANT: Crooke, Stanley T.
APPLICANT: Ecker, David J.
APPLICANT: Ecker, David J.
APPLICANT: Freier, Susan M.
APPLICANT: Freier, Susan M.
APPLICANT: Massire, Christian
APPLICANT: Massire, Christian
APPLICANT: Lowery, Kristin Sannes
APPLICANT: Swayze, Eric
APPLICANT: Banet, C. Frank
APPLICANT: Bennet, C. Frank
TITLE OF INVENTION: Acute Respiratory Syndrome (SARS)
FILE REFERENCE: ISISO03-100 (BIOL0008US)
CURRENT APPLICATION NUMBER: US/10/831,901A
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Length 20;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Query Match

0.3%; Score 15.2; DB 1;
Best Local Similarity 85.0%; Pred. No. 5.9e+02;
Matches 17; Conservative 0; Mismatches 3;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CUNKENT FILING DATE: 2004-04-26

PRIOR APPLICATION NUMBER: 60/466,426

PRIOR FILING DATE: 2003-04-28

PRIOR FILING DATE: 2003-04-28

PRIOR PLING DATE: 2003-06-6

PRIOR APPLICATION NUMBER: 60/469,562

PRIOR APPLICATION NUMBER: 60/467,770

PRIOR APPLICATION NUMBER: 60/469,627

PRIOR APPLICATION NUMBER: 60/469,627

PRIOR PLING DATE: 2003-06-10

PRIOR PLING DATE: 2003-06-10
Sequence 21493, Application US/10831901A Publication No. US20050100885A1 GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ; Sequence 22366, Application US/10811901A; Publication No. US20050100885A1; GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CTHER INFORMATION: Antisense compound US-10-831-901A-21493
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     4905 AATATGAAAATGAATATGTT 4924
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AATAAGAAATAAACATGTT
```

```
APPLICANT: Crooke, Stanley T.
APPLICANT: Ecker, David J.
APPLICANT: Freier, Susan M.
APPLICANT: Massire, Christian
APPLICANT: Massire, Christian
APPLICANT: Massire, Christian
APPLICANT: Massire, Christian
APPLICANT: Baker, Brenda F.
APPLICANT: Baker, Erenda F.
APPLICANT: Compositions And Methods For The Treatment Of Severe
ITILE OF INVENTION: Compositions And Methods For The Treatment OF Severe
ITILE OF INVENTION: Acute Respiratory Syndrome (SARS)
ITILE OF INVENTION NUMBER: 2004-04-26
PRIOR PLILNG DATE: 2003-04-28
PRIOR FILING DATE: 2003-04-30
PRIOR PLILNG DATE: 2003-04-30
PRIOR PLILNG DATE: 2003-06-10
PRIOR PLING DATE: 2003-06-10
PRIOR PLILNG DATE: 2003-06-10
PRIOR PLILNG DATE: 2003-06-10
PRIOR PLILNG DATE: 2003-06-10
PRIOR PLING DATE: 2003-06-10
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Gape
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Gapв
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Length 20;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Length 20;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Indele
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Query Match 0.3%; Score 15.2; DB 1; Best Local Similarity 85.0%; Pred. No. 5.9e+02; Matches 17; Conservative 0; Mismatches 3;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Query Match

0.3%; Score 15.2; DB 1;
Best Local Similarity 85.0%; Pred. No. 5.9e+02;
Matches 17; Conservative 0; Mismatches 3;
FRIOR FILING DATE: 2003-05-06

PRIOR APPLICATION NUMBER: 60/477,637

PRIOR FILING DATE: 2003-06-10

PRIOR APPLICATION NUMBER: 60/483,579

PRIOR FILING DATE: 2003-06-27

NUMBER OF SEQ ID NOS: 30063

SOFTWARE: FaetSEQ for Windows Version 4.0

SEQ ID NO 22367
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Sequence 27352, Application US/10831901A Publication No. US20050100885A1 GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ; OTHER INFORMATION: Antisense compound US-10-831-901A-22367
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ) OTHER INFORMATION: Antisense compound US-10-831-901A-27352
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            2455 TTTGTCATTGTGAAAGCTCT 2474
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           3337 TTAAGTAGTACAATCTTACC 3356
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1 rrrercaarcrcaaagcrcr 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1 rrradradracadrocrace 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                           ORGANISM: Artificial Sequence FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ORGANISM: Artificial Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                          TYPE: DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ठ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           유
                                                                                                                     APPLICANT: Freier, Susan M.
APPLICANT: Freier, Susan M.
APPLICANT: Freier, Christian
APPLICANT: Hofstadier, Steven A.
APPLICANT: Lowery Kristin Sannes
APPLICANT: Lowery Kristin Sannes
APPLICANT: Swayze, Eric
APPLICANT: Swayze, Eric
APPLICANT: Baker, Brenda F.
APPLICANT: Baker, Brenda F.
APPLICANT: Bennett, C. Frank
ITILE OF INVENTION: Compositions And Methods For The Treatment Of Severe
ITILE OF INVENTION: Acute Respiratory Syndrome (SARS)
ITILE OF INVENTION: Acute Respiratory Syndrome (SARS)
ITILE OF INVENTION NUMBER: US/10/831,901A
CURRENT APPLICATION NUMBER: US/466,426
PRIOR PILING DATE: 2003-04-20
PRIOR PILING DATE: 2003-05-06
PRIOR PILING DATE: 2003-05-06
PRIOR PILING DATE: 2003-05-06
PRIOR PILING DATE: 2003-06-10
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Sequence 23567, Application US/10831901A

Publication No. US20050100885A1

GENERAL INPORMATION:

APPLICANT: Crooke, Stanley T.

APPLICANT: Ecker, David J.

APPLICANT: Ecker, David J.

APPLICANT: Bampath, Rangarajan

APPLICANT: Hofstadler, Steven A.

APPLICANT: Hofstadler, Steven A.

APPLICANT: Hofstadler, Steven A.

APPLICANT: Hofstadler, Steven A.

APPLICANT: Baker, Breida F.

APPLICANT: Baker, Brenda F.

APPLICANT: B
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Length 20;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Query Match

0.3%; Score 15.2; DB 1;
Best Local Similarity 85.0%; Pred. No. 5.9e+02;
Matches 17; Conservative 0; Mismatches 3;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CTHER INFORMATION: Antisense compound US-10-831-901A-22366
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        2456 TIGICATIGIGAAAGCICIT 2475
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1 rrercharcrehadererr 20
                                                                                              Sampath, Rangarajan
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TYPE: DNA
ORGANISM: Artificial Sequence
Stanley T.
David J.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   SOFTWARE: Fast:
SEQ ID NO 22366
LENGTH: 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          FEATURE:
```

ð 쉽

```
CTHER INFORMATION: Antisense compound US-10-831-901A-29427
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ); OTHER INFORMATION: Antisense compound US-10-831-901A-29726
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                720 TGTGAAGGTTTTTGCAATTC 739
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             20 rerahacerrrredeharre 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TYPE: DNA
ORGANISM: Artificial Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TYPE: DNA ORGANISM: Artificial Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               JS-10-831-901A-29726/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             g
                                                                                                                                                                                                                                  APPLICANT: Freler, Susan M.
APPLICANT: Freler, Susan M.
APPLICANT: Freler, Susan M.
APPLICANT: Hofstadler, Steven A.
APPLICANT: Hofstadler, Steven A.
APPLICANT: Howery, Kristin Sannes
APPLICANT: Lowery, Kristin Sannes
APPLICANT: Baker, Brenda F.
APPLICANT: Baker, Brenda F.
APPLICANT: Banett, C. Frank
TITLE OF INVENTION: Compositions And Methods For The Treatment Of Severe
TITLE OF INVENTION: Compositions And Methods For The Treatment Of Severe
TITLE OF INVENTION: Acute Respiratory Syndrome (SARS)
TITLE OF INVENTION Acute Respiratory Syndrome (SARS)
TITLE OF INVENTION NUMBER: US/10/831,901A
CURRENT APPLICATION NUMBER: 60/466,426
PRIOR APPLICATION NUMBER: 60/468,562
PRIOR APPLICATION NUMBER: 60/468,627
PRIOR APPLICATION NUMBER: 60/468,627
PRIOR APPLICATION NUMBER: 60/448,579
PRIOR APPLICATION NUMBER: 60/47,637
PRIOR APPLICATION NUMBER: 60/48,627
PRIOR APPLICATION NUMBER: 6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      WS-10-831-901A-29427/c

Sequence 29427, Application US/10831901A

Publication No. US20050100885A1

GENERAL INFORMATION:
APPLICANT: Crooke, Stanley T.
APPLICANT: Sampath, Rangarajan
APPLICANT: Freier, Bavid J.
APPLICANT: Freier, Stann M.
APPLICANT: Hofstadler, Steven A.
APPLICANT: Bassire, Christian
APPLICANT: Lowery, Kristin Sannes
APPLICANT: Baker, Brenda F.
APPLICANT: Baker, Brenda F.
APPLICANT: Bener, C. Frank
TITLE OF INVENTION: Compositions And Methods For The Treatment Of Severe
TITLE OF INVENTION: Acute Respiratory Syndrome (SARS)
FILE REFERENCE: ISISO083-100 (BIOL0008US)
CURRENT APPLICANTION NUMBER: US/10/831,901A

CURRENT FILING DATE: 2004-04-26
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 0.3%; Score 15.2; DB 1; Length 20;
85.0%; Pred. No. 5.9e+02;
trive 0; Mismatches 3; Indels
Sequence 27353, Application US/10811901A Publication No. US20050100885A1 GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     , OTHER INFORMATION: Antisense compound US-10-831-901A-27353
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        3336 TITAAGIAGIACAAICTIAC 3355
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1 rrrragragracagrograc 20
                                                                                                                       APPLICANT: Crooke, Stanley T.
APPLICANT: Excer, David J.
APPLICANT: Sampath, Rangarajan
APPLICANT: Freier, Susan M.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TYPE: DNA ORGANISM: Artificial Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Query Match
Best Local Similarity
Matches 17; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         SEQ ID NO 27353
LENGTH: 20
```

```
Sequence 29726, Application US/10831901A
Publication No. US20050100895A1
GENERAL INPORMATION:
HUBBICANT: Crooke, Stanley T.
APPLICANT: Ecker, David J.
APPLICANT: Respect David J.
APPLICANT: Massilte, Christian
APPLICANT: Massilte, Christian
APPLICANT: Massilte, Christian
APPLICANT: Bennett, C. Frank
APPLICANT: Bandet, Susan M.
APPLICANT: Bandet, Susan M.
APPLICANT: Bandet, Susan M.
APPLICANT: Bennett, C. Frank
TITLE OF INVENTION: Acute Respiratory Syndrome (SARS)
FILE REFERENCE: IS150083-100 (BLOL0008US)
CURRENT APPLICATION NUMBER: 05/466,426
FRIOR APPLICATION NUMBER: 06/466,426
FRIOR PALICATION NUMBER: 06/466,52
FRIOR PLING DATE: 2003-04-30
FRIOR PLING DATE: 2003-04-30
FRIOR PLING DATE: 2003-04-30
FRIOR PLING DATE: 2003-06-30
FRIOR APPLICATION NUMBER: 60/466,627
FRIOR APPLICATION NUMBER: 60/466,627
FRIOR APPLICATION NUMBER: 60/466,627
FRIOR APPLICATION NUMBER: 60/466,627
FRIOR PLING DATE: 2003-06-30
F
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ó
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Query Match 0.3%; Score 15.2; DB 1; Length 20; Best Local Similarity 85.0%; Pred. No. 5.9e+02; Matches 17; Conservative 0; Mismatches 3; Indels
PRIOR FILING DATE: 2003-05-05 PRIOR PILING DATE: 2003-05-05 PRIOR PLING DATE: 2003-05-06 PRIOR PILING DATE: 2003-05-06 PRIOR PILING DATE: 2003-04-30 PRIOR PILING DATE: 2003-04-30 PRIOR PILING DATE: 2003-04-30 PRIOR PILING DATE: 2003-05-06 PRIOR PILING DATE: 2003-05-06 PRIOR PILING DATE: 2003-06-10 PRIOR PILING DATE: 2003-06-37 NUMBER OF SEQ ID NOS: 30063 SOFTWARE: FASTSEQ for Windows Version 4.0 SCOTUDNOS-20427
```

```
PRIOR APPLICATION NUMBER: US/09/782,604
PRIOR FILING DATE: 2001-02-14
NUMBER OF SEQ ID NOS: 45
SOFTWARE: Patentin Ver. 2.1
LENOTH: 20
                                                                                                                                                                                                                                                                                                                           US-10-981-507-4
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               RESULT 781
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           셤
                                                                                                                                                                                                                                                                                                                                                                                          GENERAL INFORMATION:
GENERAL INFORMATION:
GENERAL INFORMATION:
APPLICANT: ECKer, David J.
APPLICANT: ECKer, David J.
APPLICANT: Ecker, David J.
APPLICANT: Sampath, Rangarajan
APPLICANT: Massire, Christian
APPLICANT: Massire, Christian
APPLICANT: Massire, Christian
APPLICANT: Swayze, Eric
APPLICANT: Swayze, Eric
APPLICANT: Banet, C. Frank
ITILE OF INVENTION: Acute Respiratory Syndrome (SARS)
ITILE OF INVENTION: Acute Respiratory Syndrome (SARS)
ITILE OF INVENTION: Acute Respiratory Syndrome (SARS)
CURRENT APPLICATION NUMBER: US/10/831,901A
CURRENT APPLICATION NUMBER: 60/466,426
PRIOR APPLICATION NUMBER: 60/466,426
PRIOR FILING DATE: 2003-04-28
PRIOR FILING DATE: 2003-04-28
PRIOR FILING DATE: 2003-05-06
PRIOR FILING DATE: 2003-04-30
PRIOR FILING DATE: 2003-04-30
PRIOR FILING DATE: 2003-05-06
PRIOR APPLICATION NUMBER: 60/468,527
PRIOR APPLICATION NUMBER: 60/463,779
PRIOR APPLICATION NUMBER: 60/463,779
PRIOR APPLICATION NUMBER: 60/463,579
PRIOR APPLICATION NUMBER: 60/483,579
PRIOR APPLICATION NUMBER: 60/483,579
PRIOR APPLICATION NUMBER: 60/483,579
                                                                             ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Sequence 4, Application US/10981507

Publication No. US20050132970A1

GENERAL INFORMATION

APPLICANT: GOSMAMI, USHA

APPLICANT: GOSMAMI, SUBHASH CHANDER

APPLICANT: GOSMAMI, SUBHASH CHANDER

TITLE OF INVENTION: PROBER K.

TITLE OF INVENTION: THE SAME

TITLE OF INVENTION: THE SAME

FILE REFERENCE: 05689/0117

CURRENT APPLICATION NUMBER: US/10/981,507
                                                                                Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Gaps
                                                                                ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ö
                 Query Match 0.3%; Score 15.2; DB 1; Length 20; Best Local Similarity 85.0%; Pred. No. 5.9e+02; Matches 17; Conservative 0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Length 20;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Query Match 0.3%; Score 15.2; DB 1; Best Local Similarity 85.0%; Pred. No. 5.9e+02; Matches 17; Conservative 0; Mismatches 3;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           NUMBER OF SEQ ID NOS: 30063
SOFTWARE: FastSEQ for Windows Version 4.0
SEQ ID NO 30017
LENGTH: 20
                                                                                                                                                                                                                                                                                                                  ; Sequence 30017, Application US/10831901A; Publication No. US20050100885A1; GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ) OTHER INFORMATION: Antisense compound US-10-831-901A-30017
                                                                                                                              5020 ACTGTAAAAAAAAAAA 5039
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        3999 CACTICCTITGCTGTGGACA 4018
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1 crcrracrerecreredaca 20
                                                                                                                                                                                 20 AATGACAAAAAAAAAA 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ORGANISM: Artificial Sequence
                                                                                                                                                                                                                                                                                              10-831-901A-30017
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     US-10-981-507-4/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             FYPE: DNA
                                                                                                                                                                              셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         g
```

```
RESULT 780

US-10-257-158A-6109/C

US-10-257-158A-6109/C

Sequence 6109, Application US/10257158A

Publication No. US20050142543A1

GENERAL INFORMATION:

APPLICANT: Barany, Francis

APPLICANT: Gerry, Norman P.

FILE REFERENCE: 19603/2834

CURRENT FILING DATE: 2002-10-07

FRIOR APPLICATION NUMBER: UST/US01/10958

PRIOR APPLICATION NUMBER: UST/US01/10958

PRIOR APPLICATION NUMBER: UST/US01/10958

PRIOR APPLICATION NUMBER: UST/US01/10958

PRIOR APPLICATION NUMBER: UST/US01/10958

NUMBER OF SEQ ID NOS: 9544

SEQ ID NO 6109

LENGTH: 20

LENGTH: 20

LENGTH: 20

LENGTH: 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Sequence 245, Application US/10697527
Publication No. US20040146898A1
Publication No. US20040146898A1
GENERAL INFORMATION:
APPLICANT: ROGEY, Marion
TITLE OF INVENTION: GENUG FITICEAE AND THE USE OF SAID MARKERS
FILE REFERENCE: US 08/983, 605
CURRENT APPLICATION NUMBER: US/10/697,527
GURRENT APPLICATION NUMBER: PGT/DE96/01185
PRIOR PILING DATE: 1996-06-27
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ; OTHER INFORMATION: Description of Artificial Sequence: Hypothetical Probe Sequence US-10-257-158A-6109
                                                                                                                                                                                                                                                ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ö
                                                                                                                                                                                                                                                   Gape
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Gaps
                                                                                                                                                                                                                                                   ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ö
                                                                                      OTHER INFORMATION: Description of Artificial Sequence: Primer
                                                                                                                                                                         Query Match
0.3%; Score 15.2; DB 1; Length 20;
Best Local Similarity 85.0%; Pred. No. 5.9e+02;
Matches 17; Conservative 0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Length 20;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Indele
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Query Match 0.3%; Score 15.2; DB 1; Best Local Similarity 85.0%; Pred. No. 5.9e+02; Matches 17; Conservative 0; Mismatches 3;
                                                                                                                                                                                                                                                                                                          4424 CATCTGTGTCCTACTACAGG 4443
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               3930 GGTTGGCTGGGACCTTAGGT 3949
                                                                                                                                                                                                                                                                                                                                                                       20 carcregriccractricage 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         20 Gerrescressascresser 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ORGANISM: Artificial Sequence
TYPE: DNA ORGANISM: Artificial Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         US-10-697-527-245/c
```

```
ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ö
                                                                                                                                                                                                                                                                                                                             Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                              RESULT 782

US-11-008-747-305/C

US-11-008-747-305/C

Sequence 305, Application US/11008747

Publication No. US2005095710A1

GENERAL INFORMATION:

APPLICANT: Lex M. Coweert

APPLICANT: Susan M. Freier

APPLICANT: Breter P. Monia

APPLICANT: Breter P. Monia

APPLICANT: Breter P. Monia

APPLICANT: Breter P. Monia

APPLICANT: Robert McKay

TILLE OF INVENTION: ANTISENSE MODULATION OF PTP1E EXPRESSION

FILE REFERENCE: ISPH-0576

CURRENT APPLICATION NUMBER: US/11/008,747

CURRENT FILING DATE: 2001-05-04

PRIOR FILING DATE: 2001-05-14

PRIOR FILING DATE: 2000-07-31

PRIOR FILING DATE: 2000-07-31

PRIOR FILING DATE: 2000-07-31

PRIOR FILING DATE: 2000-07-31

SEQ ID NO 305

LENGTH: 20

TYPE: NAMERE: 2000-07-18

SEQ ID NO 305

LENGTH: 20

TYPE: NAMERE: NAMERE: NAMERE: US 09/487,368

FEBNOTH: 20

TYPE: NAMERE: NAMERE: 2000-07-18
                                                                                                                                                                                                                                                                                                                           .
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ö
                                                                                                                                                                                                                                                                    Query Match 0.3%; Score 15.2; DB 1; Length 20; Best Local Similarity 85.0%; Pred. No. 5.9e+02; Matches 17; Conservative 0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Query Match 0.3%; Score 15.2; DB 1; Length 20; Best Local Similarity 85.0%; Pred. No. 5.9e+02; Matches 17; Conservative 0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ; OTHER INFORMATION: Antisense Oligonucleotide US-11-008-747-305
## PRIOR APPLICATION NUMBER: DE 195 25 284.5
| PRIOR FILING DATE: 1995-06-28
| NUMBER OF SEQ ID NOS: 466
| SOFTWARE: Patentin version 3.1
| SEQ ID NO 245
| LENGTH: 20
| TYPE: DNA
| TYPE: DNA
| ORGANISM: Triticum sp.
                                                                                                                                                                                                                                                                                                                                                                      3857 GTGTTGTGGATATGCATCAC 3876
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            2152 GAGCTCCAAGCCTTACATGA 2171
                                                                                                                                                                                                                                                                                                                                                                                                                          20 Grerreregercrectricac 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TYPE: DNA
ORGANISM: Artificial Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                        셤
                                                                                                                                                                                                                                                                                                                                                                            ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ઠે
```

Search completed: August 18, 2005, 08:51:49 Job time : 50 secs

셤

4,0,00,00	2,00,0	. ທີ່ທີ່ທີ່	ດ ບໍ່ບໍ່ດ	132, 23, A 23, A	23,	044	2000	, 22 4 4 4	, 2, 2, 2, 2, 3, 4, 4, 4, 4, 4, 4, 4, 4, 4, 4, 4, 4, 4,	31, Ap 57, A	Sequence 29, Appl Sequence 22, Appl	131,	105,	107, 1, Ap	6, Ag	9 41	9,9,	Sequence 8, Appli Sequence 8, Appli Sequence 8, Appli		9,67		ခြဲဆို	136	10.40	, A
US-09-809-545A-84 US-10-352-704-12 US-10-352-704-18 US-08-525-864A-15	3-696-791- 3-665-220- 3-618-408E 3-257-218-	US-09-311-760-5 US-09-291-692-6 US-08-865-579-5 US-08-556-627A-6	US-10-059-749-5 US-09-163-099-6 US-10-337-060-6 US-09-952-768-6	US-09-766-253-132 US-08-319-590-23 US-08-487-001A-23	3-630-822A-233-711-905-23	US-03-03-03-23 US-03-467-642-10 US-08-882-046-44 US-08-565-047-44	US-09-308-047-52 US-08-980-071-52 US-08-757-536-52 US-09-314-093-52	US-09-250-848-52 US-09-251-885-52	US-09-337-280-52 US-09-372-175-52 US-10-200-522-52	9-904-744-2 9-308-003-31 9-844-634-57	9-554-726A-2 9-802-320A-2 3-105-1018-2	US-09-766-253-131 US-09-665-6648-1074	9-090-672B-105	9-090-672B-1 9-065-058-1	US-09-439-616-6 US-09-439-616-12	US-09-422-978-4157 US-08-474-177-8	US-08-487-033-8 US-08-480-810-8	US-08-508-735-8 US-08-848-251-8 US-08-486-047-8	US-09-120-130-8 US-09-115-252-8	US-08-467-023-167 US-08-986-515-8	US-09-120-128-8 US-09-120-129-8	9-120-131-8 9-120-131-8 9-662-250A-3	US-09-844-634-138 US-09-322-409-143	3-645-021-5 3-645-021-5 3-456-090A-4 3-227-800A-6	3-921-9
4.4.4.6.	6.6.6.6.6.6.6.6.6.6.6.6.6.6.6.6.6.6.6.	.3 .3 .11 .17 .17 .17	6.6.6.6.7.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.	2002	e. e	2000		.3.22	. e. e. e.	.3 20 20	6. 6. 6. 6. 6. 6. 6. 6. 6. 6. 6. 6. 6. 6	i i i i i i i i i i i i i i i i i i i	.e.	3 17	5.3 21 21 21 21 21 21 21 21	.3 19	.3 20	m.e.e.	. 20 20 20 20 20 20 20 20 20	.3 20	e.e.	. e. e.	666	. e. e. e.	. w.
œ œ œ 4∗	4 C C C C	0 71 0 0 71 0 0 0 0 0 0 0 0 0 0 0 0 0 0				17.			10.888	0 0 0 4 4 4	غ.غ. د د	910			16		e. e.	تون م		<u>د</u> د د د	من من م		œ ت ه		
	S S S S S S S S S S S S S S S S S S S	24 4 4 4 5 5 5 5 6 5 6 5 6 5 6 5 6 5 6 5	64 74 74 84 94 94	C 50 C 51 C 51			, v v v v v v v v v v v v v v v v v v v	63		2 6 9 6 9 6 9 9 9 9 9 9 9 9 9 9 9 9 9 9	711 C 72		0 7 7 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0					88 0 0						102 103 C 104	
) Ltd.	14 Seconds	gnments) n cell updates/sec	gggcccggtacc 5085 ,		482				nance to have a ssult being printed, tribution.		Description	ance 11,	ence 8,	ance 6,	ance 2,	ance 15,	ance 10,	ence 12, ence 4,	ance 4,	ence 24,	ance 55, ance 55,	ance 10, ance 55, ance 3.	ance 4,	106	ance 15,
GenCore version 5.1.6 (c) 1993 - 2005 Compugen Li	sw model	(without aignments) 3.422 Million cell u	.gcaggatcgaggggg	Gapext 0.5 1 residues	chosen parameters:		0% 1100% 241 summaries		or of results predicted by chance to sequal to the score of the result beingysis of the total score distribution	SUMMARIES	QI	US-08-182-060A-11 US-08-712-702A-11	US-09-213-834B-29 US-09-213-834B-8 US-09-203-036-7	US-09-923-236-6 US-09-859-736-1	US-09-859-736-2 US-09-213-834B-9	US-09-190-976B-15 US-09-213-834B-3	US-10-009-962-10 US-09-859-736-5	US-09-213-834B-12 US-09-068-043-4 US-09-853-646A-3	US-08-805-813-4 US-09-859-736-6	US-09-377-502-24 US-09-853-646A-4	US-09-976-618A-55 US-09-976-968A-55	US-1U-234-764-1U . US-09-975-059A-55 . US-09-859-736-3	-09-859-	US-09-538-709-391 US-09-396-196G-82442 US-09-396-196G-108648	-08-849-
Ger Gopyright (c)	search, us; st 18, 2005	US-10-667-022-4	5085 1 ggatcccccgggctg IDENTITY NUC	.0 , Ga	w	length: 8 length: 80	Minimum Match ( Maximum Match 1 Listing first 2	fetch4rni.seg:*	the number than or ed by anal	245	Query Match Length DB	.7 40	.53	25.5	.5 .5 .5 .5 .5 .5	2.22	.5 24	30 30 4	.4 21	.4 24	4.4.	4. 4. 4.	.4 20	0.4 25 1	20 .
	OM nucleic - nucleic Run on: Augu	itle:	Pertect score: 50 Sequence: 1 Scoring table: II	earched:	Total number of h	Minimum DB seg ler Maximum DB seg ler	Post-processing: Post-	Database :	Pred. No. is score greater and is derive		Result On Score Ma	 	ገዊግሀ		ص ص د د	111		15			23 23	7 7 7 7 7 7 7 7 7	28	31 18.8	

Ĺ

Column
10   10   10   10   10   10   10   10
10   10   10   10   10   10   10   10
10.0   1.5   8   1.5
10.0   1.5   8   1.5
10.0   1.5   8   1.5
10.0   1.5   8   1.5
15.8   0.3   2.0   1 US-09-453-234-4   Sequence   10.0   15.8   0.3   2.1   1 US-09-452-298-29   Sequence   11.0   15.8   0.3   2.1   1 US-09-452-298-29   Sequence   11.0   15.8   0.3   2.1   1 US-09-452-298-29   Sequence   11.0   15.4   0.3   2.1   1 US-09-452-298-39   Sequence   11.0   15.4   0.3   2.1   1 US-09-452-298-39   Sequence   11.0   15.4   0.3   2.1   1 US-09-452-298-37   Sequence   11.0   1 US-09-452-298-37   Sequence   11.0   1 US-09-452-298-37   Sequence   11.0   1 US-09-452-298-37   Sequence   11.0   Sequ
10.0   15.8   0.3   20   1 US-09-453-234-4   10.0   15.8   0.3   21   1 US-09-231-2948-29   10.0   15.8   0.3   21   1 US-09-231-2948-29   10.0   15.4   0.3   11   1 US-09-285-664B-107   11.1   15.4   0.3   17   1 US-09-285-664B-107   11.2   15.4   0.3   17   1 US-09-285-664B-107   11.2   15.4   0.3   17   1 US-09-285-664B-107   12.2   15.4   0.3   17   1 US-09-285-664B-107   12.2   12.4   0.3   17   1 US-09-285-664B-107   12.2   12.4   0.3   17   1 US-09-285-664B-107   12.2   12.4   0.3   2.0   1 US-09-106-284B-108   12.2   12.4   0.3   2.0   1 US-09-106-284B-108   12.2   12.4   0.3   2.0   1 US-09-106-281B-108   12.2   12.2   12.2   12.2   12.2   12.2   12.2   12.2   12.2   12.2   12.2   12.3   1
110 15.8 8 0.3 21 111 115.1 115.4 0.3 21 117 118.8 118.4 117 118.4 118.4 118.7
1100 1110 1111 1111 1111 1112 1113 1114 1115 1115 1116 1117 1118 1119
1000 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
1009 8 8 9 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1

7, Appli 7, Appli 70, Appli 7023, Ap 1635, Ap 1637, Ap 1638, Ap 1639, Ap

```
Сарв
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            DB 1; Length 40;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Length 32;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     US-09-213-834B-29/c
Sequence 29, Application US/09213834B
Fatent No. 6825011
GENERAL INFORMATION:
TITLE OF INVENTION:
TITLE OF INVENTION: IMPROVED METHODS FOR INSERTION OF
TITLE OF INVENTION: UNCHEIC ACIDS INTO CIRCULAR VECTORS;
TITLE OF INVENTION: UNCHEIC ACIDS INTO CIRCULAR VECTORS;
CURRENT PEPLICATION UNUBER: US/09/213,834B
CURRENT FILING DATE: 1998-12-17
NUMBER OF SEQ ID NOS: 50
SOFTWARE: FaetSEQ for Windows Version 4.0
SEQ ID NO 29
LENGTH: 32
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  IndelB
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                5,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          DB 1;
                                                  COMPUTE: ISBOS
COMPUTE: Diskette, 3.50 inch, 1.0 MB
MEDIUM TYPE: Diskette, 3.50 inch, 1.0 MB
COMPUTER: Macintosh
OPERATING SYSTEM: Macintosh System, 6.0
SOFTWARE: Microsoft Word 4.0
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/12,702A
FILING DATE: 12-SEP-1996
CLASSIFICATION DATA:
APPLICATION NUMBER: 08/182,060
FILING DATE: 21-JM-1994
APPLICATION NUMBER: US/92/0657
FILING DATE: 24 JULY 1991
ATTORNEY/AGENT INFORMATION:
NAME: LINDA AXAMETHY FLOYD
REGISTATION NUMBER: 33,692
REGISTATION NUMBER: 33,692
REGISTATION NUMBER: BB-1032-A
TELECOMMUNICATION NUMBER: BB-1032-A
TELECOMMUNICATION NUMBER: BB-1032-A
TELECOMMUNICATION NUMBER: BB-1032-A
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          5041 AAAAAAAAAAAAAAAAAAAAAAAACTCGAG 5070
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Score 33.2;
Pred. No. 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Score 26.8;
Pred. No. 6;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    FEATURE:
; CTHER INFORMATION: Cloning Vector
US-09-213-834B-29
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          0.7%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TYPE: DNA
ORGANISM: Artificial Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Query Match
Best Local Similarity 93.3%;
Matches 28; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             (302) 892-7949
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     INFORMATION FOR SEQ ID NO:
SEQUENCE CHARACTERISTICS:
LENGTH: 40 base pairs
TYPE: nucleic acid
STRANDEDNESS: single
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Local Similarity 92.1 nes 35; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ; TOPOLOGY: linear
US-08-712-702A-11
                      U.S.A.
                                     19898
               COUNTRY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TELEFAX:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Best Loca
Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ઠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              APPLICANT: John W. Pierce
APPLICANT: Phillips S. Kerr
APPLICANT: Mary F. Becker-Manley
APPLICANT: Richard W. Pearlstein
APPLICANT: Richard W. Pearlstein
APPLICANT: Truchard W. Pearlstein
APPLICANT: Truchard W. Pearlstein
APPLICANT: APPLICANT: O' Schweiger
TITLE OF INVENTION: McGalactinol Synthase from Zucchini and Soybean
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  DB 1; Length 40;
                                                                                                                                                                                                                                                                                                       COMPUTER READABLE FORM:

MEDIUM TYPE: Diskette, 3.50 inch, 1.0 MB
COMPUTER: Macintosh
OPERAIING SYSTEM: Macintosh System, 6.0
SOFTWARE: Microsoft Word 4.0
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/182,060A
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             0.7%; Score 33.2; D
92.1%; Pred. No. 1.1;
tive 0; Mismatches
                                   APPLICANT: Bruce J. Schweiger
TITLE OF INVENTION: Nuclocide Sequences
TITLE OF INVENTION: Of Galactinol
TITLE OF INVENTION: Synthase from
NUMBER OF SEQUENCES: 12
CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               FILING DATE:
CLASSIFICATION: 800
PRIOR APPLICATION DATE:
APPLICATION NUMBER: US 92/06057
FILING DATE: 24 JULY 1991
ATTORNEY/AGENT INFORMATION:
NAME: LINDA AXAMETHY FLOYD
REGISTRATION NUMBER: 33,692
REFERENCE/DOCKET NUMBER: BB-1032-A
TELECOMMUNICATION INFORMATION:
TELECOMMUNICATION:
                                                                                                                                                                                  ADDRESSEE: E. I. du Pont de Nemours
ADDRESSEE: and Company
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ADDRESSEE: E. I. du Pont de Nemours
ADDRESSEE: and Company
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Sequence 11, Application US/08712702A
Patent No. 5773699
GENERAL INFORMATION:
APPLICANT: JOHN W. Pierce
      Mary F. Becker-Manley
Richard W. Pearlstein
Becker-Manley
                                                                                                                                                                                                                            1007 Market Street
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1007 Market Street
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Query Match
Best Local Similarity 92.1
Matches 35; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TELEFAX: (302)892-7949
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        INFORMATION FOR SEQ ID NO:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            SEQUENCE CHARACTERISTICS:
LENGTH: 40 base pairs
TYPE: nucleic acid
STRANDEDNESS: single
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                NUMBER OF SEQUENCES: 1:
CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                  COUNTRY: U C
                                                                                                                                                                                                                          STREET: 1007 Mar)
CITY: Wilmington
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ; TOPOLOGY:
US-08-182-060A-11
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             -08-712-702A-11
```

ठ g

ö

```
TYPE: DNA
ORGANISM: Artificial Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TYPE: DNA ORGANISM: Artificial Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              RESULT 8
US-09-859-736-2/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          US-09-859-736-1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               g
                                                                                                                                                                                                                                                                                            ò
                                                                                                                                                                                                                                                                                                                                 셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ö
                                                                                                                                                                                                                                                                                                                                                                                                                                            ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                              Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        .,
0
                                                                                                                                                                                                                                                                                                                                                                                                                                            ö
                                                                                                                                                                                                                                                                                                                                                                                                 Ouery Match 0.5%; Score 26.4; DB 1; Length 28; Best Local Similarity 96.4%; Pred. No. 5.7; Matches 27; Conservative 0; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             APPLICANT: Sheppard, Paul O.
APPLICANT: Sheppard, Paul O.
TITLE OF INVENTION: SECRETED SALIVARY ZSIG63 POLYPEPTIDE
TITLE DOF INVENTION: SECRETED SALIVARY ZSIG63 POLYPEPTIDE
TILE REFERENCE: 97-71
CURRENT APPLICATION NUMBER: US/09/923,236
CURRENT FILING DATE: 1099-0317
NUMBER OF SEQ ID NOS: 9
SOFTWARE: PASTSEQ for Windows Version 3.0
SEQ ID NO 7
LENGTH: 26
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Query Match 0.5%; Score 26; DB 1; Length 26; Best Local Similarity 100.0%; Pred. No. 5.9; Matches 26; Conservative 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               %33-23-23-23-6/c
; Sequence 6, Application US/09923236
; Patent No. 6828419
; GENERAL INFORMATION:
; APPLICANT: Sheppard, Paul O.
; APPLICANT: Adder, David A.
; TITLE OF INVENTION:
; FILE REFERENCE: 97-71
                                     GENERAL INFORMATION:
APPLICANT: Romantchikov, Yuri
APPLICANT: Romantchikov, Yuri
ATTLE OF INVENTION: IMPROVED METHODS FOR INSERTION OF
TITLE OF INVENTION: IMPROVED ACIDS INTO CIRCULAR VECTORS
FILE REFERENCE: 11639/1
CURRENT APPLICATION NUMBER: US/09/213,834B
CURRENT FILING DATE: 1998-12-17
NUMBER OF SEQ ID NOS: 50
SEQ ID NO 8
SEQ ID NO 8
LENGTH: 28
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ; OTHER INFORMATION: Oligonucleotide primer ZC7764a
US-09-923-236-7
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      5024 TAAAAAAAAAAAAAAAAAAAAAA 5049
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             26 TAAAAAAAAAAAAAAAAAAAAA 1
Sequence 8, Application US/09213834B Patent No. 6825011
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Sequence 7, Application US/09923236; Parent No. 6828419; GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                     OTHER INFORMATION: Cloning Vector
US-09-213-834B-8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ORGANISM: Artificial Sequence FEATURE:
                                                                                                                                                                                                                                                                             TYPE: DNA ORGANISM: Artificial Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   US-09-923-236-7/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TYPE: DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ठ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         g
```

```
CITY: Magnolia
    NAME/KEY: polyA_signal
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     COUNTRY: USA
                                                                                                                                    Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Query Match
Best Local Similarity
                             ; LOCATION: (1)..(2,
; OTHER INFORMATION
US-09-926-028-28
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            US-09-213-834B-3/c
                                                                                                                Query Match
Best Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Matches
                                                                                                                                                           Matches
                                                                                                                                                                                                         ઠે
                                                                                                                                                                                                                                           g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           APPLICANT: DATE, MASAYO
APPLICANT: DATE, MASAYO
APPLICANT: PUKUDA, HISAO
APPLICANT: PUKUDA, HISAO
APPLICANT: TAKAHARA, YOSHIVUKI
TITLE OF INVENTION: METHOD FOR ANALYZING EXPRESSION FREQUENCIES OF GENES
FILE REFERENCE: 212833USOPCT
CURRENT APPLICATION NUMBER: US/09/926,028
CURRENT FILING DATE: 2001-08-16
PRIOR FILING DATE: 2000-02-17
PRIOR FILING DATE: 1999-02-17
PRIOR FILING DATE: 1999-02-17
NUMBER OF SEQ ID NOS: 45
SOFTWARE: Patentin version 3.1
SEQ ID NO 28
LENGTH: 24
                                                                                                                                                                                                         ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ö
                                                                                                                                                                                                         Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Gaps
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence: Synthetic
US-09-859-736-2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ö
                                                                                                                                                                                                         ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Length 25;
                                                                                                                                                       0.5%; Score 25; DB 1; Length 25; 100.0%; Pred. No. 7.7; tive 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                       GENERAL INFORMATION:

APPLICANT: Romantchikov, Yuri
APPLICANT: Romantchikov, Yuri
APPLICANT: Romantchikov, Yuri
APPLICANT: ROMANTION: IMPROVED METHODS FOR INSERTION OF
TITLE OF INVENTION: MUCLEIC ACIDS INTO CIRCULAR VECTORS
FILE REFERENCE: 11639/1
CURRENT APPLICATION NUMBER: US/09/213,834B
CURRENT FILING DATE: 1998-12-17
NUMBER OF SEQ ID NOS: 50
SOFTWARE: FRAUSEQ for Windows Version 4.0
SEQ ID NO 9
LENGTH: 25
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Query Match

0.5%; Score 24.6; DB 1;
Best Local Similarity 96.0%; Pred. No. 8.8;
Matches 24; Conservative 1; Mismatches 0;
                                                                                                                                                                                                                                                5025 AAAAAAAAAAAAAAAAAAAAA 5049
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 5041 AAAAAAAAAAAAAAAAAAAAAAA
                                                                                                                                                                                                                                                                                         25 AAAAAAAAAAAAAAAAAAAAA 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             25 AAAAAAAAAAAAAAAAAAAAAA 1
                                                                                                                                                                                                                                                                                                                                                                              US-09-213-834B-9/c
; Sequence 9, Application US/09213834B
; Patent No. 6825011
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               US-09-926-028-28
; Sequence 28, Application US/09926028
; Patent No. 6806049
; GENERAL INFORMATION:
APPLICANT: MAEXAWA, TAKAMI
; APPLICANT: MITSUI, AKIRA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ) OTHER INFORMATION: Cloning Vector US-09-213-8348-9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     OTHER INFORMATION: Synthetic DNA FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TYPE: DNA ORGANISM: Artificial Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ORGANISM: Artificial Sequence
                                                                                                                                                                                                    Conservative
                                                                                                                                                       Query Match
Best Local Similarity
Matches 25; Conservat
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        g
                                                                                                                                                                                                                                                ò
                                                                                                                                                                                                                                                                                     a
```

```
ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ô
                                                                                                                                                                                                                                                                                                                                                                     syndecan-4 cytoplasmic domain signaling pathway
                                                      Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Gaps
                                                      ;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ZIP: 01930

COMPUTER READABLE FORM:
MEDIUM TYPE: Diskette, 3.50 inch, 1.40 Mb storage COMPUTER: Dell PC
OPERATING SYSTEM: MS DOS
SOFTWARE: Microsoft Word version 97
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/190,976B
FILING DATE: 12-No. 6815187-1998
CLASSIFICATION: Unknown
                                                                                                                                                                                       RESULT 11
US-09-190-976B-15/C
; Sequence 15, Application US/09190976B
; Patent No. 6815187
; GENERAL INFORMATION:
; APPLICANT: Simons, Michael
; APPLICANT: Simons, Arie
; TITLE OF INVENTION: Stimulation of angiogenesis via
             DB 1; Length 24;
10;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           0.5%; Score 24; DB 1; Length 24;
100.0%; Pred. No. 10;
iive 0; Mismatches 0; Indels
                                                      0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Sequence 3, Application US/09213834B
Patent No. 6825011
GENERAL INFORMATION:
APPLICANT: Romantchikov, Yuri
TITLE OF INVENTION: INPROVED METHODS FOR INSERTION OF
TITLE OF INVENTION: NUCLEIC ACIDS INTO CIRCULAR VECTORS
0.5%; Scc...
100.0%; Pred. No. ...
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ATTORNEY/AGENT INFORMATION:
NAME: David Prashker, Esq.
REGISTRATION NUMBER: 29,693
REFERENCE/DOCKET NUMBER: BIS-041
TELECOMMUNICATION: INFORMATION:
TELEPHONE: (978) 525-3794
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ) MOLECULE TYPE: peptide
; SEQUENCE DESCRIPTION: SEQ ID NO: 15:
US-09-190-976B-15
                                                                                                                                                                                                                                                                                                                                                                                                                                     ADDRESSEE: David Prashker, Esq.
                                                                                             5025 AAAAAAAAAAAAAAAAAAAA 5048
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1 AAAAAAAAAAAAAAAAAAAAAAAA 24
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        24 AAAAAAAAAAAAAAAAACTCGAG 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                        STREET: P.O. Box 5387
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          LENGTH: 24 base pairs
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      STATE: Massachusetts
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              INFORMATION FOR SEQ ID NO: 15
                                                      24; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           OPOLOGY: linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         24; Conservative
```

ø

```
ORGANISM: Artificial Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               US-09-213-834B-12
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TYPE: DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           g
                                                                                                                                                                                                                                                                      g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ð
                                                                                                                                                                                                                                à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ö
                                                                                                                                                                                                                                                                                                                                                ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Gaps
                                                                                                                                                                                                                                                                                                                                                  Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  APPLICANT: LI, WAN-LIANG ROBERT
APPLICANT: LI, WAN-LIANG ROBERT
APPLICANT: LI, WAN-LIANG SPECIAL APPLICANT: LI, WAN-LIANG S.
TITLE OF INVENTION S.
TITLE REPERENCE: 16517.248
CURRENT APPLICATION NUMBER: US/09/859,736
CURRENT FILING DATE: 2001-05-18
PRIOR FILING DATE: 2000-05-19
NUMBER OF SEQ ID NOS: 7
SSETWARE: PALENTIN Ver. 2.1
SSEQ ID NO S.
LENGTH: 24
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ; OTHER INFORMATION: Description of Artificial Sequence: DNA Primer US-10-009-962-10
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ;
0
                                                                                                                                                                                                                                                                                                                                                  ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     US-10-009-962-10/c

; Sequence 10, Application US/10009962
; Patent No. 6825321
; GENERAL INFORMATION:
; JAPLICANT: TTO, Kitukatsu
; TITLE OF INVENTION: Plant Thermogenic Genes and Proteins
; TILE OF INVENTION: Plant Thermogenic Genes and Proteins
; TILE OF INVENTION: Plant Thermogenic Genes and Proteins
; CURRENT PILITO NUMBER: US/10/005,962
; CURRENT APPLICATION NUMBER: PCT/JP00/03806
; PRIOR FILING DATE: 2002-01-23
; PRIOR FILING DATE: 1999-06-14
; RIOR APPLICATION NUMBER: JP11-167439
; RIOR FILING DATE: 1999-06-14
; NUMBER OF SEQ ID NOS: 12
; SOPTWARE: PatentIn Ver. 2.0
; SEQ ID NO 10
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Query Match

0.5%; Score 24; DB 1; Length 24;
Best Local Similarity 100.0%; Pred. No. 10;
Matches 24; Conservative 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                Length 24;
                                                                                                                                                                                                                                                                                                                                                0; Indels
                                                                                                                                                                                                                                                                                                   Query Match 0.5%; Score 24; DB 1; Best Local Similarity 100.0%; Pred. No. 10; Matches 24; Conservative 0; Mismatches (
FILE REFERENCE: 11639/1
CURRENT APPLICATION NUMBER: US/09/213,834B
CURRENT FILING DATE: 1998-12-17
NUMBER OF SEQ ID NOS: 50
SOFTWARE: FastSEQ for Windows Version 4.0
SEQ ID NO 3
LENGTH: 24
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        5025 AAAAAAAAAAAAAAAAAAAAA 5048
                                                                                                                                                                                                                                                                                                                                                                                                5025 AAAAAAAAAAAAAAAAAAAA 5048
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   24 AAAAAAAAAAAAAAAAAAAAAAA 1
                                                                                                                                                                                                                                                                                                                                                                                                                                           24 ААААААААААААААААААААА 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             US-09-859-736-5/c; Sequence 5, Application US/09859736; Patent No. 6838244; GENREAL INPORMATION:
                                                                                                                                                                                                                           ) OTHER INFORMATION: Cloning Vector US-09-213-834B-3
                                                                                                                                                                       TYPE: DNA ORGANISM: Artificial Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ORGANISM: Artificial Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TYPE: DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   셤
                                                                                                                                                                                                                                                                                                                                                                                                                                           g
                                                                                                                                                                                                                                                                                                                                                                                                    ò
```

```
ö
                                                                                                                                                            ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Gaps
                                                                                                                                                            Gaps
FEATURE:
) OTHER INFORMATION: Description of Artificial Sequence: Synthetic
) OTHER INFORMATION: CATAD oligonuclectide
US-09-859-736-5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ö
                                                                                                                                                            ..
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 0.5%; Score 24; DB 1; Length 28; 100.0%; Pred. No. 12; ive 0; Mismatches 0; Indels
                                                                                                             Length 24;
                                                                                                                                                         0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                GENERAL NO. 88250.1.

GENERAL INFORMATION:
APPLICANT: ROMANICALIKOV, YULI
APPLICANT: ROMANICALIKOV, YULI
TITLE OF INVENTION: IMPROVED METHODS FOR INSERTION OF
TITLE OF INVENTION: WUCLEIC ACIDS INTO CIRCULAR VECTORS
FILE REFERENCE: 11639/1
CURRENT APPLICATION NUMBER: US/09/213,834B
CURRENT FILING DATE: 1998-12-17
NUMBER OF SEQ ID NOS: 50
SEQ ID NOS: 50
SEQ ID NO 12
LENGTH: 28
                                                                                                             DB 1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TITLE OF INVENTION: POSITIVE SELECTION
TITLE OF INVENTION: POSITIVE SELECTION
TITLE OF SEQUENCES: 5
CORRESPONDENCE ADDRESS:
ADDRESSEE: COMPANY
ADDRESSEE: COMPANY
STREET: 1007 MARKET STREET
CITY: WILMINGTON
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        RESULT 19. 08-043-4
; Sequence 4, Application US/09068043
; Sequence 4. Application US/09068043
; Patent No. 6048694
; GENERAL INFORMATION:
; APPLICANT: MICHAEL GENE BRANUCCI
APPLICANT: VASANTHA NAGREAJAN
; TITLE OF INVENTION: VECTOR FOR BACILLUS SP.
                                                                                                             Query Match 0.5%; Score 24; DB Best Local Similarity 100.0%; Pred. No. 10; Matches 24; Conservative 0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              MEDIUM TYPE: DISKETTE, 3.5 INCH
COMPUTER: IBM PC COMPATIBLE
ODERATING SYSTEM: MICROSOFT WINDOWS 95
SOFTWARE: MICROSOFT OFFICE 97
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                5025 AAAAAAAAAAAAAAAAAAAAA 5048
                                                                                                                                                                                                            5025 AAAAAAAAAAAAAAAAAAAAAA 5048
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   STATE: DELAWARE COUNTRY: UNITED STATES OF AMERICA ZIP: 19898 COMPUTER READABLE FORM:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/068,043
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                28 AAAAAAAAAAAAAAAAAAAAA S
                                                                                                                                                                                                                                                        24 AAAAAAAAAAAAAAAAAAAAAAAAA 1
                                                                                                                                                                                                                                                                                                                                    US-09-213-834B-12/c
15 Sequence 12, Application US/09213834B
2 Patent No. 6825011
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  OTHER INFORMATION: Cloning Vector
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ORGANISM: Artificial Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       24; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      FILING DATE:
CLASSIFICATION: 435
PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Best Local Similarity
```

```
APPLICANT: LI, WAN-LIANG ROBERT
APPLICANT: ZHOU, JIAN S.
TITLE OF INVENTIONS: FLUORESCENT OLIGONUCLEOTIDES AND USES THEREOF
FILE REPERENCE: 16517.248
CURRENT APPLICATION NUMBER: US/09/859,736
CURRENT FILING DATE: 2001-05-18
PRICA APPLICATION NUMBER: 60/205,452
PRICA FILING DATE: 2000-05-19
NUMBER OF SEQ ID NOS: 7
SOFTWARE: PATENTIN VET. 2.1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Score 21; DB 1; Length 21;
Pred. No. 22;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Indels
                                                                                                                                                                                       COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
COMPOTER: DATE: NO.650381 yet assigned
FILING DATE: NO.650381 yet assigned
CLASSITCATION NUMBER: JP 8-068809
FILING APPLICATION NUMBER: JP 8-068809
FILING DATE: 25-MAR-1996
FILING DATE: 25-MAR-1996
FILING APPLICATION NUMBER: JP 8-187763
FILING DATE: JP-MAR-1996
ATTOMNEY/AGENT INFORMATION:
MANNER ADELICATION NUMBER: JP 8-187763
FILING DATE: JP-JUL-1996
ATTOMNEY/AGENT INFORMATION:
       TITLE OF INVENTION: Production Thereof
NUMBER OF SEQUENCES: 19
CORRESPONDENCE ADDRESS:
ADDRESSEE: Townsend and Townsend and Crew LLP
STREET: Two Embarcadero Center, Eighth Floor
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ; NAME/KEY: - ; ; LOCATION: 1..21 ; OTHER INFORMATION: /note= "BKSBE primer" US-08-805-813-4
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  NAME: Bastian, Kevin L. REGISTRATION NUMBER: 34,774
REGISTRANCE/DOCKET NUMBER: 85760-000000
TELECOMMUNICATION INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   0.4%; Scc.
100.0%; Pre
0; 7
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    4 TCCCCCGGGCTGCAGGAATTC 24
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1 rccccccccccccccccc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Sequence 6, Application US/09859736 Patent No. 6838244 GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TELEPHONE: (415) 576-0200
TELEFAX: (415) 576-0300
INFORMATION FOR SEQ ID NO: 4:
SEQUENCE CHARACTERISTICS:
LENGTH: 21 base pairs
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TYPE: DNA ORGANISM: Artificial Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Query Match
Best Local Similarity luu..
21; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TYPE: nucleic acid
STRANDEDNESS: single
                                                                                                                              San Francisco
California
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        MOLECULE TYPE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          US-09-859-736-6/c
                                                                                                      STREET:
CITY: Sa
                                                                                                                                                                        COUNTRY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       SEQ ID NO 6
LENGTH: 21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Sequence 4, Application US/08805813
Patent No. 6750381
GENERAL INFORMATION:
APPLICANT: Mitsuhara, Ichiro
APPLICANT: Ohshima, Masahiro
APPLICANT: Ohshim, Yuko
TITLE OF INVENTION: Pathogen-Resistant Plants and Method for
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Query Match
0.4%; Score 21.8; DB 1; Length 26;
Best Local Similarity 92.0%; Pred. No. 22;
Matches 23; Conservative 0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             APPLICANT: Sass, Philip
APPLICANT: Sass, Philip
APPLICANT: Grasso, Luigi
APPLICANT: Kinzler, Kenneth
APPLICANT: Kinzler, Kenneth
APPLICANT: Vogelstein, Bert
TITLE OF INVENTION: A METHOD FOR GENERATING HYPERMUTABLE
TITLE OF INVENTION: ORGANISMS
TITLE OF INVENTION: ORGANISMS
TITLE OF INVENTION: NUMBER: US/09/853,646A
CURRENT APPLICATION NUMBER: US/09/853,646A
CURRENT APPLICATION NUMBER: 0/204,769
PRIOR FILING DATE: 2000-05-17
NUMBER OF SEQ ID NOS: 4
SOFTWARE: FastSEQ for Windows Version 4.0
SEQ ID NO 3
LENGTH: 26
                                                                                                                                                                                                                                                                                                                                                                                                                                                         DB 1; Length 30;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                    Query Match

0.5%; Score 24; DB
Best Local Similarity 100.0%; Pred. No. 13;
Matches 24; Conservative 0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        5022 TGTAAAAAAAAAAAAAAAAAAA 5046
APPLICATION NUMBER: 60/006,201
FILING DATE: NOVEMBER 3, 1995
ATTORNEY/AGENT INFORMATION:
NAME: FELTHAM, S. NEIL
REGISTRATION NUMBER: 36,506
REFERENCE/DOCKET NUMBER: CR-9807
TELEFAN: 302-92-6460
TELEFAN: 302-773-0164
INFORMATION POR SEQ ID NO: 4:
SEQUENCE CHARACTERISTICS:
LENGTH: 30 base pairs
TYPE: NUCleic acid
STRANDENNES: single
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         2 TGGCAAAAAAAAAAAAAAAAAA 26
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1 GGATCCCCCGGGCTGCAGGAATTC 24
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             4 GGATCCCCCGGGCTGCAGGAATTC 27
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Sequence 3, Application US/09853646A Patent No. 6825038 GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       i OTHER INFORMATION: Recombinant DNA
US-09-853-646A-3
                                                                                                                                                                                                                                                                                                                                                               DNA (genomic)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TYPE: DNA ORGANISM: Artificial Sequence
                                                                                                                                                                                                                                                                                                                                       linear
                                                                                                                                                                                                                                                                                                                                    TOPOLOGY: lin
MOLECULE TYPE:
HYPOTHETICAL: N
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            JS-09-853-646A-3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   JS-08-805-813-4
                                                                                                                                                                                                                                                                                                                                                                                                         US-09-068-043-4
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ò
```

ð

```
Sequence 55, Application US/09976968A

Sequence 55, Application US/09976968A

Patent No. 6818753

GENERAL INFORMATION:
APPLICANT: Mucic, Robert L.
APPLICANT: Storhoff, James J.
APPLICANT: Bighanian A.
APPLICANT: Taton, Thomas A.
ITILE OF INVENTION: NANOPARTICLES HAVING OLIGONUCLECTIDES ATTACHED THERETO
                                                                                                           Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ö
                                                                                                           .
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   OTHER INFORMATION: Description of Artificial Sequence:random; OTHER INFORMATION: synthetic sequence US-09-976-618A-55
                                                                   DB 1; Length 25;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Ouery Match 0.4%; Score 20; DB 1; Length 20; Best Local Similarity 100.0%; Pred. No. 28; Matches 20; Conservative 0; Mismatches 0; Indels
                                                                                                           2; Indels
                                                                   Ouery Match
0.4%; Score 20.8; D
Best Local Similarity 91.7%; Pred. No. 29;
Matches 22; Conservative 0; Mismatches
                                                                                                                                                  5022 TGTAAAAAAAAAAAAAAAAAA 5045
                                                                                                                                                                                       2 TGGCAAAAAAAAAAAAAAAAAA 25
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    5025 AAAAAAAAAAAAAAAAA 5044
                                                                                                                                                                                                                                                       RESULT 22
US-09-976-618A-55
; Sequence 55, Application US/09976618A
; Parent No. 6812334
; FEATURE:
; OTHER INFORMATION: Recombinant DNA
US-09-853-646A-4
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1 padadadadadadada 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ORGANISM: Artificial Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        RESULT 23
US-09-976-968A-55
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             g
                                                                                                                                                            ò
                                                                                                                                                                                           ద
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ö
                                                                                                                       ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Gaps
                                                                                                                         Gaps
                                                                                                                                                                                                                                                                                     Sequence 24, Application US/09377502

Sequence 24, Application US/09377502

Patent No. 6791011

GENERAL INFORMATION:
APPLICANT: Gene Shears Pty. Limited
APPLICANT: Paul, Wyatt

APPLICANT: Paul, Wyatt

APPLICANT: Huttner, Eric
APPLICANT: Huttner, Eric
APPLICANT: Hottner, Eric
CURRENT APPLICATION NUMBER: US/09/377,502
CURRENT APPLICATION NUMBER: US/09/377,502
CURRENT FILING DATE: 1998-08-20
PRIOR FILING DATE: 1998-02-20
PRIOR FILING DATE: 1998-02-21
NUMBER OF SEQ ID NOS: 68

SOGTWARE: PatentIn version 3.2

SEQ ID NO 24

LENGTH: 24
  ; OTHER INFORMATION: Description of Artificial Sequence: Synthetic; CTHER INFORMATION: dT oligonuclectide
US-09-859-736-6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ;
;
                                                                                                                           ..
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   GENERAL INFORMATION:
GENERAL INFORMATION:
APPLICANT: Nicolaides, Nicholas
APPLICANT: Sass, Philip
APPLICANT: Sass, Philip
APPLICANT: Kinalar, Kenneth
APPLICANT: Kinalar, Kenneth
APPLICANT: Wogelstein, Bert
TITLE OF INVENTION: A METHOD FOR GENERATING HYPERMUTABLE
TITLE OF INVENTION: ORGANISMS
FILE REFERENCE: 01107.00138
CURRENT APPLICATION NUMBER: 08/09/853,646A
CURRENT APPLICATION NUMBER: 60/204,769
PRIOR PILING DATE: 2000-05-17
NUMBER OF SEQ ID NOS: 4
SOFTWARE: FastSEQ for Windows Version 4.0
SEQ ID NO 4
LENGTH: 25
LENGTH: 25
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Query Match 0.4%; Score 21; DB 1; Length 24; Best Local Similarity 100.0%; Pred. No. 26; Matches 21; Conservative 0; Mismatches 0; Indels
                                                                                Query Match
0.4%; Score 21; DB 1; Length 21;
Best Local Similarity 100.0%; Pred. No. 22;
Matches 21; Conservative 0; Mismatches 0; Indels
                                                                                                                                                                5025 AAAAAAAAAAAAAAAAA 5045
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        , OTHER INFORMATION: Figure 1G: Ubgla
US-09-377-502-24
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Sequence 4, Application US/09853646A Patent No. 6825038
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1 GGATCCCCCGGGCTGCAGGAA 21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         4 GGATCCCCCGGGCTGCAGGAA 24
                                                                                                                                                                                                       21 AAAAAAAAAAAAAAAAAAA 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TYPE: DNA ORGANISM: Artificial Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ORGANISM: Artificial
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       RESULT 21
US-09-853-646A-4
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TYPE: DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         g
```

ð

```
Sequence 55, Application US/09975059A

Patent No. 628432

GENERAL INFORMATION:

APPLICANT: Letsinger, Robert L.

APPLICANT: Bleasinger, Robert C.

APPLICANT: Bleasinger, Robert C.

APPLICANT: Bleasinger, Robert C.

APPLICANT: Bloanin, Robert C.

APPLICANT: Bloanin, Robert C.

APPLICANT: Taton, Thomas A.

TITLE OF INVENTION: NANOPARTICLES HAVING OLIGONUCLEOTIDES ATTACHED THERETO

TITLE OF INVENTION: NANOPARTICLES HAVING OLIGONUCLEOTIDES ATTACHED THERETO

FILE REFERENCE: 00-713-i15

CURRENT APPLICANTION: NANOPARTICLES HAVING OLIGONUCLEOTIDES ATTACHED THERETO

FILE REFERENCE: 00-713-i15

CURRENT APPLICANTION: NUMBER: 09/975,059A

CURRENT FILING DATE: 1999-06-26

PRIOR FILING DATE: 1999-01-29

PRIOR FILING DATE: 1999-01-29

PRIOR FILING DATE: 1999-01-29

PRIOR FILING DATE: 1999-01-29

PRIOR FILING DATE: 1996-07-29

PRIOR FILING DATE: 1996-07-29

PRIOR FILING DATE: 1996-07-29

PRIOR FILING DATE: 2000-04-26

NUMBER OF SEQ ID NOS: 64

SOFTWARE: MICROSOFT WORD CONTROL CONTROL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   GENERAL INFORMATION:
APPLICANT: LI, WAN-LIANG ROBERT
APPLICANT: LI, WAN-LIANG ROBERT
APPLICANT: ZHOU, JIAN S.
TITLE OF INVENTION: FLUORESCENT OLIGONUCLEOTIDES AND USES THEREOF
FILE REFERENCE: 16517.248
CURRENT APPLICATION NUMBER: US/09/859,736
CURRENT FILLING DATE: 2001-05-18
PRIOR APPLICATION NUMBER: 60/205,452
PRIOR PELLING DATE: 2000-05-19
NUMBER OF SEQ ID NOS: 7
SOFTWARE: Patentin Ver. 2.1
SEQ ID NO 3
LENTH: 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    OTHER INFORMATION: Description of Artificial Sequence: Synthetic OTHER INFORMATION: CATI oligonucleotide
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ) OTHER INFORMATION: Description of Artificial Sequence:random ; OTHER INFORMATION: synthetic sequence US-09-975-059A-55
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Length 20;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    0.4%; Score 20; DB 1; Length 20; 100.0%; Pred. No. 28;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Score 20; DB 1;
Pred. No. 28;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Query Match 0.4%; Score 20; DB Best Local Similarity 100.0%; Pred. No. 28; Matches 20; Conservative 0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  5025 AAAAAAAAAAAAAAAAA 5044
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             RESULT 26
US-09-859-736-3/c
Sequence 3, Application US/09859736
Patent No. 6838244
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AAAAAAAAAAAAAAAA 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TYPE: DNA ORGANISM: Artificial Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TYPE: DNA ORGANISM: Artificial Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        US-09-859-736-3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  OTHER INFORMATION: Description of Artificial Sequence:random
OTHER INFORMATION: synthetic sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    0.4%; Score 20; DB 1; Length 20;
100.0%; Pred. No. 28;
tive 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   DB 1; Length 20, 28;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Sequence 10, Application US/10234764

Patent No. 682531

GENERAL INFORMATION:

APPLICANT: Manoharan, Muthiah

APPLICANT: Manoharan, Muthiah

APPLICANT: Salo, Harri

APPLICANT: Salo, Harri

APPLICANT: Salo, Harri

APPLICANT: Virta, Pasi

TILE OF INVENTION: Aminooxy Functionalized Oligomers

FILE REFERENCE: 1S1SS089

CURRENT APPLICATION NUMBER: US/10/234,764

CURRENT APPLICATION NUMBER: 09/016,520

PRIOR FILING DATE: 1998-01-30

PRIOR FILING DATE: 1998-01-30

PRIOR FILING DATE: 1998-06-25

NUMBER OF SEQ ID NOS: 18

SEQ ID NO 10

LENGTH: 20
                                                                CURRENT APPLICATION NUMBER: US/09/976,968A
CURRENT FILING DATE: 2001-10-12
PRIOR PELING DATE: 2001-10-12
PRIOR FILING DATE: 2006-06-26
PRIOR FILING DATE: 1999-06-25
PRIOR PELING DATE: 1999-01-29
PRIOR PELING DATE: 1999-01-29
PRIOR APPLICATION NUMBER: 09/240,755
PRIOR APPLICATION NUMBER: 09/240,755
PRIOR PILING DATE: 1999-01-29
PRIOR PILING DATE: 1997-07-21
PRIOR APPLICATION NUMBER: 60/031,809
PRIOR PILING DATE: 1996-07-29
PRIOR APPLICATION NUMBER: 60/031,809
PRIOR PILING DATE: 1996-07-29
PRIOR PILING DATE: 1996-07-29
PRIOR PILING DATE: 1996-07-29
PRIOR PILING DATE: 1996-07-29
PRIOR PILING DATE: 2000-04-26
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   0.4%; Score 20; DB 100.0%; Pred. No. 28; tive 0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ) OTHER INFORMATION: Synthetic construct
US-10-234-764-10
             AND USES THEREFOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      5025 AAAAAAAAAAAAAAAAA 5044
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       5025 AAAAAAAAAAAAAAAAAA 5044
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1 AAAAAAAAAAAAAAA 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AAAAAAAAAAAAAAAAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ORGANISM: Artificial Sequence FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TYPE: DNA ORGANISM: Artificial Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    NUMBER OF SEQ ID NOS: 64
SOFTWARE: Microsoft Word 2000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   20; Conservative
TITLE OF INVENTION: AND UP PITE REPERENCE: 00-713-117
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    20; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Best Local Similarity
Matches 20, Conserva
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Best Local Similarity
Matches 20; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         US-10-234-764-10/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   US-09-976-968A-55
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    SEQ ID NO 55
LENGTH: 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TYPE: DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       FEATURE:
```

ઠે

RESULT 25

ò

ö

Gape

ö

ð

```
ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Gaps
                                                                                                                              US-05-538-709-391/c
| US-05-538-709-391/c
| US-05-538-709-391/c
| Sequence 391, Application US/09538709
| Patent No. 6468749
| GENERAL INFORMATION
| GENERAL INFORMATION
| TITLE OF INVENTION: SEQUENCE-DEPENDENT GENE SORTING TECHNIQUES
| TITLE REPERENCE: 540579-2006
| CURRENT APPLICATION NUMBER: US/09/538,709
| CURRENT FILING DATE: 2001-06-08
| NUMBER OF SEQ ID NOS: 1311
| SOFTWARE: PatentIn version 3.0
| SEQ ID NO 391
| LENGTH: 25
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Length 25;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            DB 1; Length 25;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        release No. 0041/04:

GENERAL INCORMATION:

APPLICANT: Michael Mittmann
APPLICANT: David Mack
APPLICANT: David Lockhart
APPLICANT: Affymetrix, Inc.
TITLE OF INVENTION: Methods of Genetic Analysis
FILE REFERENCE: 3101.
FILE REFERENCE: 3101.
FILE REFERENCE: 1999-09-15
CURRENT APPLICATION NUMBER: 60/100,678
PRIOR APPLICATION NUMBER: 60/100,678
PRIOR PELING DATE: 1998-09-17
NUMBER OF SEQ ID NOS: 127806
SEQ ID NO 82442
LENGTH: 25
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Score 18.8; DB 1;
Pred. No. 53;
0; Mismatches 2;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            , Match 0.4%; Score 18.8; D
Local Similarity 90.9%; Pred. No. 53;
les 20; Conservative 0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           WG-09-396-196G-108648

WG-09-396-196G-108648

Sequence 108648, Application US/09396196G

Patent No. 6821724

GENERAL INFORMATION:

APPLICANT: Michael Mittmann

APPLICANT: David Mack

APPLICANT: David Lockhart
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    US-09-396-196G-82442
; Sequence 82442, Application US/09396196G
; Patent No. 6821724
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           2851 CCAGAGGATCCTGCCATAGCAC 2872
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    191 GAGGCCCGGGAACGCATGTCCC 212
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1 GAGGCCCTGGAACGCATGTTCC 22
1 CTGCAGGAATTCGGCACGAG 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     25 ccadaddarccrdcrdradcac
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      0.4%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TYPE: DNA
ORGANISM: Artificial Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   20; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                FEATURE:
COTHER INFORMATION: primer
US-09-538-709-391
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TYPE: DNA ORGANISM: mus musculus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Best Local Similarity
Matches 20; Conservat
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           US-09-396-196G-82442
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          RESULT 31
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        g
                                          g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 USCOULT 48
USCOULT 58

                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Gaps
                   Gaps
                                                                                                                                                                                                                                                             Sequence 4, Application US/09859736;
Sequence 4, Application US/09859736;
Patent No. 6838244
GENERAL INFORMATION:
APPLICANT: LI, WAN-LIANG ROBERT
APPLICANT: LI, WAN-LIANS.
TITLE OF INVENTION: FLUORESCENT OLIGONUCLEOTIDES AND USES THEREOF
FILE REPERBNCE: 16517.248
CURRENT FILING DATE: 2000-05-18
PRIOR PILING DATE: 2000-05-19
NUMBER OF SEQ ID NOS: 7
SEQ ID NO 4: 2.1
SEQ ID NO 4: 2.1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       OTHER INFORMATION: Description of Artificial Sequence: Synthetic OTHER INFORMATION: CAT2 oligonucleotide
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ; OTHER INFORMATION: Description of Artificial Sequence: PCR; OTHER INFORMATION: oligonucleotide primer 3.18 ECORI
US-09-360-545-35
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Query Match

0.4%; Score 20; DB 1; Length 21;
Best Local Similarity 100.0%; Pred. No. 30;
Matches 20; Conservative 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Query Match
0.4%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 28;
Matches 20; Conservative 0; Mismatches 0; Indels
                      Indels
                          ..
0
                          0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  5025 AAAAAAAAAAAAAAAA 5044
                                                                                    5025 AAAAAAAAAAAAAAAAA 5044
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                20 AAAAAAAAAAAAAAAA 1
                                                                                                                                               20 AAAAAAAAAAAAAAAA 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ORGANISM: Artificial Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TYPE: DNA
ORGANISM: Artificial Sequence
                             20; Conservative
                                Matches
```

ð

ð

```
ô
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Gapa
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Gape
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ô
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ; OTHER INFORMATION: Oligos corresponding to polylinker sequence.
US-09-809-545A-84
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      DB 1; Length 20;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 0.4%; Score 18; DB 1; Length 18;
100.0%; Pred. No. 45;
iive 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1; Indels
                                          COMPUTER: ENDABLE FORM:
MEDIUM TYPE: Floppy disk
MEDIUM TYPE: Floppy disk
COMPUTER: ENDAP disk
COMPUTER: Floppy disk
CORERATIOR SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/849,536A
FILING DATE: Herewith
CLASSIFICATION: 435
ATTORNEY/AGENT INFORMATION:
NAME: Wong, King L.
REGISTRATION NUMBER: 1614-7026
REFERRACY/DOCKET NUMBER: 1614-7026
TELEPHONE: (202) 638 - 5000
TELEPHONE: (202) 638 - 5000
TELEPAX: (202) 638 - 4810
INFORMATION POR SEQ ID NO: 15:
SEQUENCE CHARACTERISTICS:
LENGTH: 20 base pairs
TYPE: nucleic acid
STRANDEDNESS: single
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     US-09-09-545A-84/C

Sequence 84, Application US/09809545A

Patent No. 6800455

GENERAL INFORMATION:
APPLICANT: Stanton, Lawrence W.
TITLE OF INVENTION: SECRETED FACTORS
FILE REFERENCE: SCIOS.017A

CURRENT APPLICATION NUMBER: US/09/809,545A

CURRENT FILING DATE: 2001-03-14

NUMBER OF SEQ ID NOS: 84

SOFTWARE: FastSEQ for Windows Version 4.0

SEQ ID NO 84
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   0.4%; Score 18.4; D
95.0%; Pred. No. 46;
tive 0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ; TOPOLOGY: linear
; MOLECULE TYPE: other nucleic acid
; DESCRIPTION: /desc = "Primer NPC6"
US-08-849-536A-15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              817 TGTCTACCTTTCCAGAAGC 836
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             US-10-352-704-12/c
; Sequence 12, Application US/10352704
; Patent No. 6825339
; GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1 rercraccarrecasaasec 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               5025 AAAAAAAAAAAAAA 5042
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     APPLICANT: Chatelain, Franc
Kumarev, Viktor
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      18 AAAAAAAAAAAAAAA 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TYPE: DNA
ORGANISM: Artificial Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Best Local Similarity 95.0 Matches 19; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Query Match 0.4
Best Local Similarity 100.
Matches 18; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        쉽
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ઠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Sequence 15, Application US/08849536A
Patent No. 5853976
GENERAL INFORMATION:
APPLICANT: HESSE, Friederike
APPLICANT: AMBROSIUS, Dorothee
APPLICANT: BURTSCHER, Helmut
TITLE OF INVENTION: HESTOLYTICUM AND ITS USE FOM CLOSTRIDIUM
TITLE OF INVENTION: HISTOLYTICUM AND ITS USE FOR ISOLATING CELLS AND GROUPS OF CEL
CORRESPONDENCES 20
CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                               ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ö
                                                                                                                                                                                                                                                                                                                                                                                                               Gaps
                                                                                                                                                                                                                                                                                                                                                                                                               ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ö
                                                                                                                                                                                                                                                                                                                                                                  DB 1; Length 25;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               DB 1; Length 25;
                                                                                                                                                                                                                                                                                                                                                                                                               Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ADDRESSEE: Nikaido, Marmelstein, Murray & Oram LLP STREET: 655 15th St., N.W., Suite 330 - G St. Lobby CITY: Washington
TITLE OF INVENTION: Methods of Genetic Analysis FILE REPRINCE: 3101.1
CURRENT APPLICATION NUMBER: US/09/396,196G
CURRENT FILING DATE: 1999-09-15
PRIOR PILING DATE: 1998-09-17
NUMBER OF SEQ ID NOS: 127806
SOFTWARE: PSELESC for Windows Version 4.0
SEQ ID NO 108648
TANNER: 25
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Sequence 119803, Application US/09396196G
Batent No. 6821724
GENERAL INFORMATION:
APPLICANT: Michael Mittmann
APPLICANT: David Mack
APPLICANT: David Lock
APPLICANT: APPLICANT: APPLICANT: APPLICANT: APPLICANT: APPLICANT: APPLICANT: APPLICANT: APPLICANT: AFFYMETIX, Inc.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         FILE REFERENCE: 3101.1
CURRENT APPLICATION NUMBER: US/09/396,196G
CURRENT FILING DATE: 1999-09-15
PRIOR APPLICATION NUMBER: 60/100,678
PRIOR FILING DATE: 1998-09-17
NUMBER OF SEQ ID NOS: 127806
SOFTWARE: FeatSEQ for Windows Version 4.0
LENGTH: 25
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             0.4%; Score 18.8; D
90.9%; Pred. No. 53;
tive 0; Mismatches
                                                                                                                                                                                                                                                                                                                                                              Query Match 0.4%; Score 18.8; D
Best Local Similarity 90.9%; Pred. No. 53;
Matches 20; Conservative 0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        4096 TCAAGTCACTGTCATCCTTCCA 4117
                                                                                                                                                                                                                                                                                                                                                                                                                                                           266 TCTTTAGCGTGCCTTCTTCTC 287
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       4 TCTTGAGCGTGGCTTCTCCTCT 25
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Query Match 0.4
Best Local Similarity 90.9
Matches 20; Conservative
                                                                                                                                                                                                                                                                       TYPE: DNA
CRGANISM: mus musculus
US-09-396-196G-108648
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ORGANISM: mus musculus
US-09-396-196G-119803
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       US-09-396-196G-119803
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        US-08-849-536A-15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        STATE: D
```

ò 셤

```
Sequence 15, Application US/08525864A

Patent No. 5912326

GENERAL INFORMATION:

APPLICANT: Chang, Han

TITLE OF INVENTION: Related thereto

NUMBER OF SEQUENCES: 18

NUMBER OF SEQUENCES: 18

CORRESPONDENCE ADDRESS:

ADDRESSEE: LAHIVE & COCKPIELD

STREET: 28 State Street
                                                                                                   COMPUTER KEADABLE FORM

MEDIUM TYPE: IBM PC compatible
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFFWARE: Patentin Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/033.2,704
FILING DATE: 28-Jan-2003
CLASSIFICATION: 536
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US/08/358,556A
FILING DATE: 14-DEC-1994
APPLICATION NUMBER: R 9315164
APPLICATION NUMBER: R 9315164
APPLICATION NUMBER: R 9315164
APPLICATION NUMBER: R 9315164
TELERATION NUMBER: 10-DC-1993
ATTORNEY/AGENT INFORMATION:
TELEFATION NUMBER: 10577/P58418
TELEFATION STORMATION:
TELEFAT: (202) 638-6666
TELEFAX: (202) 638-6666
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Query Match 0.4%; Score 18; DB 1; Length 18; Best Local Similarity 100.0%; Pred. No. 45; Matches 18; Conservative 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ; LOCATION: 1..18
; SEQUENCE DESCRIPTION: SEQ ID NO: 18: US-10-352-704-18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ZURIATE READABLE FORM:
MEDIUM TYPE: Ploppy disk
COMPUTER: IBM PC Compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: ABACII (text)
CURRENT APPLICATION NUMBER: US/08/525,864A
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          5025 AAAAAAAAAAAAAA 5042
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TOPOLOGY: linear MOLECULE TYPE: DNA (genomic) HYPOTHETICAL: NO
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1 AAAAAAAAAAAAAAAA 18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TYPE: nucleic acid
STRANDEDNESS: single
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ANTI-SENSE: NO FRAGMENT TYPE: N-terminal
                                                          ZIP: 20004
COMPUTER READABLE FORM:
                                      COUNTRY: U.S.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CITY: Boston
STATE: Massachusetts
COUNTRY: USA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               US-08-525-864A-15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       RESULT 37
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ద
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                RESULT 36
US-10-352-704-18
US-10-352-704-18
; Sequence 18, Application US/10352704
; Patent No. 6825339
; GENERAL INFORMATION:
; APPLICANT: Chatelain, Francois
; Kumarev, Viktor
; Kumarev, Viktor
; TITLE OF INVENTION: Process for Preparing Polynucleotides on
; Implementation

Implementation
TITLE OF INVENTION: Process for Preparing Polynucleotides on a Solid Support and Apparatus Permitting its
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     .
                                                                                                                                                                                                                                                                           ZIP: 20004

COMPUTER READABLE FORM:
    MEDIUM TYPE: Floppy disk
    COMPUTER: IBM PC compatible
    OPERATING SYSTEM: PC-DOS/MS-DOS
    SOFTWARE: Patentin Release #1.0, Version #1.25
    CURRENT APPLICATION DATE: 28-Jan-2003
    FILING DATE: 28-Jan-2003
    CLASSIFICATION: 536
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Query Match 0.4%; Score 18; DB 1; Length 18; Best Local Similarity 100.0%; Pred. No. 45; Matches 18; Conservative 0; Mismatches 0; Indels
                                                                                                               CORRESPONDENCE ADDRESS:
ADDRESSEE: Jacobson, Price, Holman & Stern
STREET: 400 Seventh St. N.W.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           NUMBER OF SEQUENCES: 31
CORRESPONDENCE ADDRESS:
ADDRESSEE: Jacobson, Price, Holman & Stern
STREET: 400 Seventh St. N.W.
CITY: Washington D.C
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   PRIOCAMSARIALONION DATA:

APPLICATION DATA:

APPLICATION NUMBER: US/08/358,556A
FILING DATE: 14-DEC-1994

APPLICATION NUMBER: FR 9315164

FILING DATE: 16-DEC-1993

ATTORNEY/AGENT INPORMATION:

NAME: Player, William E.

REGISTRATION NUMBER: 31,409

REGISTRATION NUMBER: 31,409

REFERENCE/DOCKET NUMBER: 10577/P58418

TELEPHONE: (202)638-6666

TELEFAX: (202) 639-5350

TELEFAX: RCA 24859 IDEA UR

INFORMATION FOR SEQ ID NO: 12:

SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       LOCATION: 1..18
SEQUENCE DESCRIPTION: SEQ ID NO: 12:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   5025 AAAAAAAAAAAAAAA 5042
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TOPOLOGY: linear
MOLECULE TYPE: DNA (genomic)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   LENGTH: 18 base pairs
TYPE: nucleic acid
STRANDEDNESS: single
                                                                                                                                                                                              CITY: Washington D.C
STATE: D.C
COUNTRY: U.S.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             HYPOTHETICAL: NO
ANTI-SENSE: NO
FRAGMENT TYPE: N-terminal
FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              18 AAAAAAAAAAAAAAA 1
                                                                                  NUMBER OF SEQUENCES: 31
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                NAME/KEY: CDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               US-10-352-704-12
```

ò 셤

ö

Gaps

.; 0

```
4370 La Jolla Village Drive, Suite 700
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                JMBER: US/08/618,408B
19-MAR-1996
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     NAME/KEY: misc feature
LOCATION: 1..17
OTHER INFORMATION: /note= "SK-Zap"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            16 CAGGAATTCGGCACGAG 32
                                                                                                                                                                                                                                                                                                                                                                                                                                                      TELEPHONE: (619) 535-9001
TELEFAX: (619) 535-8949
INFORMATION FOR SEQ ID NO: 6:
SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CITY: San Diego
STATE: California
COUNTRY: United States
                                         California
: United States
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Best Local Similarity 100.
Matches 17, Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             LENGTH: 17 base pairs
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           single
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   nucleic acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  STRANDEDNESS: Sil
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       FILING DATE:
                                                                                  92122
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ZIP: 92122
                                         STATE: CE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   US-08-618-408B-6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  US-08-665-220-6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Sequence 1273, Application US/09696791
Fatent No. 6770633
GENURAL INFORMATION:
APPLICANT: Robbins, Joan M.
APPLICANT: Tritz, Richard
ITILE OF INVENTION: SKIN AND EYE DISEASES
FILE REFERENCE: 480124.407;
CURRENT APPLICATION NUMBER: US/09/696,791
CURRENT PILING DATE: 2000-10-25
NUMBER OF SEQ ID NOS: 4523
SOFTWARE: PatentIn Ver. 2.0
SEQ ID NO 1273
LENGTH: 19
                                                                                                                                                                                                                                                                                                                                                                                                                      ó
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ô
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TITLE OF INVENTION: Mch4 and Mch5, Apoptotic Proteases, TITLE OF INVENTION: Nucleic Acids Encoding and Methods of Use
                                                                                                                                                                                                                                                                                                                                                                            DB 1; Length 19;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  DB 1; Length 19
                                                                                                                                                                                                                                                                                                                                                                                                                      Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ; OTHER INFORMATION: Cdk-we-hu ribozyme binding site US-09-696-791-1273
                                                                                                                                                                                                                                                                                                                                                                          Query Match 0.3%; Score 17.4; D
Best Local Similarity 94.7%; Pred. No. 58;
Matches 18; Conservative 0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Query Match 0.3%; Score 17.4; 18est Local Similarity 94.7%; Pred. No. 58; Matches 18; Conservative 0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Sequence 6, Application US/08665220
Patent No. 578673
GENERAL INFORMATION:
APPLICANT: Alnemri, Emad S.
APPLICANT: Fernandes-Alnemri, Teresa
APPLICANT: Litwack, Gerald
APPLICANT: Tomack, Gerald
APPLICANT: Tomaselli, Kevin
                 CLASSIFICATION: 530
ATTOMEY/AGENT INFORMATION:
NAME: Kara, Catherine J.
REGISTRATION NUMBER: 41,106
REPERRENCE/DOCKET WUMBER: HUI-017
TELECOMMUNICATION INFORMATION:
TELEPHONE: (617)227-7400
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            NUMBER OF SEQUENCES: 70
CORRESPONDENCE ADDRESS:
ADDRESSEE: Campbell & Flores LLP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1215 AGATCCTTCAACTCCGCTT 1233
                                                                                                                                                                                                                                                                                        TOPOLOGY: linear MOLECULE TYPE: oligonucleotide
                                                                                                                                                                                                                                                                                                                                                                                                                                                             19 GAATTCGGCACGAGGGAG 37
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1 GAATTCGGCACGAGGCAG 19
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            19 AGATCCTTCAACTCTGCTT 1
8-SEP-1995
                                                                                                                                                          TELEFAX: (617)742-4214
INFORMATION FOR SEQ ID NO:
SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                             LENGTH: 19 base pairs
TYPE: nucleic acid
STRANDEDNESS: single
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TYPE: DNA ORGANISM: Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      US-09-696-791-1273/c
                                                                                                                                                                                                                                                                                                                                   US-08-525-864A-15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                             ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ઠે
```

```
Sequence 6, Application US/08618408B
Sequence 6, Application US/08618408B
Patent No. 5851815
GENERAL INFORMATION:
APPLICANT: Alnemri, Emad S.
APPLICANT: Fernandes-Alnemri, Teresa
APPLICANT: Tomasalli, Kevin
TITLE OF INVENTION: Proteases, Nucleic Acids Encoding and Methods of Use
NUMBER OF SEQUENCES: 63
CORRESPONDENCE ADDRESS:
ADDRESSEE: Campbell and Plores
STREET: 4370 La Jolla Village Drive, Suite 700
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     0.3%; Score 17; DB 1; Length 17;
100.0%; Pred. No. 57;
cive 0; Mismatches 0; Indels
COMPUTER FEADABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: Ploppy disk
COMPUTER: Ploppy disk
COMPUTER: PLOPPY disk
COMPUTER: PER PC COMPATIBLE
COMPUTER: PAPEL CATION DATA:
APPLICATION NUMBER: US/08/665,220
FILING DATE: 14-JUN-1996
CLASSIFICATION: 43-5
PRICA APPLICATION: DATA:
APPLICATION NUMBER: US/08/618,408
FILING DATE: 19-MAR.1996
FILING DATE: 19-MAR.1996
ATTORNEY/AGENT INFORMATION:
NAME: Campbell, Cathryn A.
REGISTRATION NUMBER: 31,915
REFERENCE/DOCKET NUMBER: PID 2165
TELECOMMUTICATION INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      SOFTWARE: Patentin Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/618.408R
```

gibbs-10-667-022-4.rni

```
Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Gaps
                                                                                                                                                                                                                                                                                                                                 Sequence 5, Application US/09311760
Patent No. 6274318
GENERAL INFORMATION:
APPLICANT: Alnemri, Emad S.
Fernandes-Alnemri, Teresa
Litwack, Gerald
TITLE OF INVENTION: Applectic Protease Mch6, Nucleic Acids
Encoding Same and Methods of Use
                                                                                                                      ;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ZIP: 92122
COMPUTER READABLE FORM:
MEDLUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/311,760
FILING DATE: 13-May-1999
CLASSIFICATION: <Unknown>
                                                               Query Match 0.3%; Score 17; DB 1; Length 17; Best Local Similarity 100.0%; Pred. No. 57; Matches 17; Conservative 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Query Match

0.3%; Score 17; DB 1; Length 17;
Best Local Similarity 100.0%; Pred. No. 57;
Matches 17; Conservative 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ADDRESSEE: Campbell & Flores LLP
STREET: 4370 La Jolla Village Drive, Suite 700
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  P-ID 2180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            PRIOR APPLICATION DATA: APPLICATION NUMBER: 08/865,579
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ; TOPOLOGY: Ilnear; MOLECULE TYPE: CDNA; SEQUENCE DESCRIPTION: SEQ ID NO: 5: US-09-311-760-5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ATTORNEY AGBAT INFORMATION:
NAME: Cambell, Cathryn A.
REGISTRATION NUMBER: 31,815
TELECOMMUNICATION INFORMATION:
TELECOMMUNICATION INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      RESULT 43
US-09-291-692-6
; Sequence 6, Application US/09291692
; Patent No. 6287795
; GENERAL INFORMATION:
; APPLICANT: Alnemri, Emad S.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         535-9849
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       STATE: California
COUNTRY: United States
                                                                                                                                                                                                        1 CAGGAATTCGGCACGAG 17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   LENGTH: 17 base pairs
                                                                                                                                                                   16 CAGGAATTCGGCACGAG 32
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TYPE: nucleic acid
STRANDEDNESS: single
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1 caggaarrcgccacgag 17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TELEFAX: (619) 535-9
INFORMATION FOR SEQ ID NO: 5:
SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              NUMBER OF SEQUENCES: 87
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CORRESPONDENCE ADDRESS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CITY: San Diego
                                                                                                                                                                                                                                                                                         RESULT 42
US-09-311-760-5
                  US-09-257-218-5
                                                                                                                                                                                                                셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sequence 5, Application US/09257218

Patent No. 6271361

GENERAL INFORMATION:
GENERAL INFORMATION:
APPLICANT: Alnemri, Emad S.
APPLICANT: Fernandes-Alnemri, Teresa
APPLICANT: Litwack, Gerald
ITILE OF INVENTION: Apoptotic Protease Mch6, Nucleic Acids
ITILE OF INVENTION: Encoding Same and Methods of Use
NUMBER OF SEQUENCES: 87
CORRESCONDENCE ADDRESS:
ADDRESSES: Campbell & Flores LLP
STREET: 4370 La Jolla Village Drive, Suite 700
CITY: San Diego
STATE: California
COUWTRY: United States
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 DB 1; Length 17; 57;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      COMPUTER FELDABLE FORM:

MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
COMPUTER: Ploppy disk
COMPUTER: IBM PC compatible
COPERATIOG SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/257,218
FILING DATE:
CLASSIFICATION:
PRIOR APPLICATION NUMBER: US/08/865,579
FILING DATE: 29-MAY-1997
ATTORNEY/AGENT INFORMATION:
NAME: Campbell, Cathryn A.
REGISTRATION NUMBER: 31,815
REFERENCE/DOCKET NUMBER: 9-ID 2180
TELEFRANCE/DOCKET NUMBER: P-ID 2180
TELEFRANCE (619) 535-9049
INFORMATION FOR SEQ ID NO: 5:
SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Query Match
0.3%; Score 17;
Best Local Similarity 100.0%; Pred. No.
Matches 17; Conservative 0; Mismatc
                                                                                                                                                                                                                                                                                                                                                                                   NAME/KEY: misc feature

LOCATION: 1..17

OTHER INFORMATION: /note= "SK-Zap"

US-08-618-408B-6
CLASSIFICATION: 435
ATTORNEY/AGENT INFORMATION:
NAME: Campbell, Cathryn A.
REGISTRATION NUMBER: 31,815
REFERENCE/DOCKET NUMBER: P-ID
TELECOMMUNICATION INFORMATION:
TELEPHONE: (619) 535-9001
TELEPAX: (619) 535-9001
TELEPAX: (619) 535-849
INFORMATION FOR SEQ ID NO: 6: SEQUENCE CHARACTERISTICS:
LENGTH: 17 base pairs
TYPE: nucleic acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1 CAGGAATTCGGCACGAG 17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                LENGTH: 17 base pairs
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TYPE: nucleic acid
STRANDEDNESS: single
TOPOLOGY: linear
MOLECULE TYPE: CDNA
                                                                                                                                                                                                                                                                                                                                      TOPOLOGY: linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            92122
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         RESULT 41
US-09-257-218-5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ઠ
```

```
PatentIn Release #1.0, Version #1.25
                                                                                                                                                                      ATTORNEY AGENT INFORMATION:
NAME: Campbell, Cathryn A.
REGISTRATION UNDHER: 31,815
REFERENCE/DOCKET NUMBER: P-ID 2180
TELECOMMUNICATION INFORMATION:
TELEFRAN: (619) 535-9001
TELEFRAN: (619) 535-9001
TELEFRAN: (619) 535-9001
TELEFRAN: (619) 535-9849
INFORMATION FOR SEQ ID NO: 5:
SEQUENCE CHARACTERISTICS:
LENGTH: 17 base pairs
TYPE: nucleic acid
TYPE: nucleic acid
STRANDEDNESS: single
                                                                     APPLICATION NUMBER: US/08/865,579
FILING DATE: 29-MAY-1997
CLASSIFICATION: 435
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Sequence 6, Application US/08556627A Patent No. 6462175
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Best Local Similarity 100.0%; F
Matches 17; Conservative 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ATCORNEY/AGENT INFORMATION:
NAME: Campbell, Cathryn A.
REGISTRATION NUMBER: 31,815
REFERENCE/DOCKET NUMBER: P-1
TELECOMMUNICATION INFORMATION:
TELEFRAX: (619) 535-9901
TELEFRAX: (619) 535-8949
INFORMATION FOR SEQ ID NO: 6:
SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        16 CAGGAATTCGGCACGAG 32
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CORRESPONDENCE ADDRESS:
ADDRESSEE: Campbell &
STREET: 4370 La Jolle
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CITY: San Diego
STATE: California
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            MOLECULE TYPE: CDNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     JS-08-556-627A-6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    US-08-556-627A-6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               US-08-865-579-5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          COUNTRY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            patent No. 6455296
| GENERAL INFORMATION:
| APPLICANT: Alnemi, Emad S. |
| APPLICANT: Alnemi, Emad S. |
| APPLICANT: Alnemi, Teresa |
| APPLICANT: Litwack, Gerald |
| TILE OF INVENTION: Apoptotic Protease Mch6, Nucleic Acids |
| TILE OF INVENTION: Brooding Same and Methods of Use |
| TITLE OF INVENTION: Brooding Same and Methods of Use |
| TITLE OF INVENTION: Brooding Same and Methods of Use |
| TITLE OF INVENTION: Brooding Same and Methods of Use |
| TITLE OF INVENTION: Brooding Same and Methods of Use |
| TITLE OF INVENTION: Brooding Same and Methods of Use |
| TITLE OF INVENTION: Brooding Same and Methods of Use |
| TITLE OF INVENTION: Brooding Same and Methods of Use |
| TITLE OF INVENTION: Brooding Same and Methods of Use |
| TITLE OF INVENTION: Brooding Same and Methods of Use |
| TITLE OF INVENTION: Brooding Same and Methods of Use |
| TITLE OF INVENTION: Brooding Same and Methods of Use |
| TITLE OF INVENTION: Brooding Same and Methods of Use |
| TITLE OF INVENTION: Brooding Same and Methods of Use |
| TITLE OF INVENTION: Brooding Same and Methods of Use |
| TITLE OF INVENTION: Brooding Same and Methods of Use |
| TITLE OF INVENTION: Brooding Same and Methods of Use |
| TITLE OF INVENTION: Brooding Same and Methods of Use |
| TITLE OF INVENTION: Brooding Same and Methods of Use |
| TITLE OF INVENTION: Brooding Same and Methods of Use |
| TITLE OF INVENTION: Brooding Same and Methods of Use |
| TITLE OF INVENTION: Brooding Same and Methods of Use |
| TITLE OF INVENTION: Brooding Same and Methods of Use |
| TITLE OF INVENTION: Brooding Same and Methods of Use |
| TITLE OF INVENTION: Brooding Same and Methods of Use |
| TITLE OF INVENTION: Brooding Same and Methods of Use |
| TITLE OF INVENTION: Brooding Same and Methods of Use |
| TITLE OF INVENTION: Brooding Same and Methods of Use |
| TITLE OF INVENTION: Brooding Same and Methods of Use |
| TITLE OF INVENTION: Brooding Same and Methods of Use |
| TITLE OF INVENTION: Brooding Same and Use |
| TITLE OF INVENTION: Brooding Same and Use |
| TITLE OF INVENTI
                                  APPLICANT: Litwack, Gerald
APPLICANT: Armetrong, Robert
APPLICANT: Armetrong, Robert
APPLICANT: Tomaselli, Kevin
TITLE OF INVENTION: MCH4 AND MCH5, APOPTOTIC PROTEASE,
TITLE OF INVENTION: NUCLEIC ACIDS ENCODING AND METHODS OF USE
TOWNER OF SEQUENCES: 75
CORRESPONDENCE ADDRESS:
ADDRESSEE: SEED and BERRY
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             0.3%; Score 17; DB 1; Length 17; 100.0%; Pred. No. 57;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            SOFTWARE: Patentin Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/291,692
FILING DATE: 04-13-1999
CLASSIFICATION: 435
ATTORNEY/AGENT INFORMATION:
NAME: Christiansen, william T.
REGISTRATION NUMBER: 44,614
REFERENCE/DOCKET NUMBER: 480140.424C3
TELECOMMUNICATION INFORMATION:
                                                                                                                                                                                                                                                                                               E: SEED and BERRY
6300 Columbia Center, 701 Fifth Avenue
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ; Pred. No. 57, 0; Mismatches
   Fernandes-Alnemri, Teresa
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 LOCATION: 1..17

OTHER INFORMATION: /note= "SK-Zap"
US-09-291-692-6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Sequence 5, Application US/08865579
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        16 CAGGAATTCGGCACGAG 32
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TELEPHONE: (206) 622-4900
TELEPAX: (206) 682-6031
INFORMATION FOR SEQ ID NO: 6: SEGUENCE CHARACTERISTICS: LENGTH: 17 base pairs
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ZIP: 92122
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatil
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               NAME/KEY: misc feature LOCATION: 1..17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Query Match
Best Local Similarity 100.
Matches 17; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TYPE: nucleic acid
STRANDEDNESS: single
TOPOLOGY: linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        COMPUTER READABLE FORM: MEDIUM TYPE: Floppy
                                                                                                                                                                                                                                                                                                              STREET: 6300 CTTY: Seattle STATE: Washington
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             98104
```

```
GENERAL INFORMATION:
GENERAL INFORMATION:
APPLICANT: Fernandes-Alnemri, Teresa
APPLICANT: Itwack, Gerald
APPLICANT: Armetrong, Robert
APPLICANT: Tomaselli, Kevin
TITLE OF INVENTION: Mch3, A No. 6462175el Apoptotic Protease,
TITLE OF INVENTION: Nucleic Acids Encoding and Methods of Use
0.3%; Score 17; DB 1; Length 17; 100.0%; Pred. No. 57;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    COMPUTER READABLE FORM:

COMPUTER READABLE FORM:

COMPUTER: Floppy disk

COMPUTER: Ploppy disk

COMPUTER: PLOPSY MS-DOS

SOFTWARE: PatentIn Release #1.0, Version #1.25

CURRENT APPLICATION DATA:

APPLICATION NUMBER: US/08/556,627A

FILLNG DATE: 13-NOV-1995

CLASSIFICATION: 435
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       E: Campbell and Flores
4370 La Jolla Village Drive, Suite 700
```

```
ADDRESSEE: Campbell and Flores
STREET: 4370 La Jolla Village Drive, Suite 700
CITY: San Diego
STATE: California
COUNTRY: USA
ZIP: 92122
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            NAME: Campbell, Cathryn A.
REGISTRATION NUMBER: 31,815
REPERRENCE/DOCKET UNBER: P-ID 1813
TELECOMMUNICATION:
TELEPHONE: (619) 535-9001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ; Sequence 6, Application US/10337060
; Patent No. 6716960
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ) FEATURE:
; OTHER INFORMATION: Primer SK-Zap
US-10-337-060-6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 16 CAGGAATTCGGCACGAG 32
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1 CAGGAATTCGGCACGAG 17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TELEPHONE: (619) 535-9001
TELEPAX: (619) 535-8949
INFORMATION FOR SEQ ID NO: 6: SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TYPE: DNA ORGANISM: Artificial Sequence
  Litwack, Gerald
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                LENGTH: 17 base pairs
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TYPE: nucleic acid
STRANDEDNESS: single
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TOPOLOGY: linear
APPLICANT:
APPLICANT:
APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           US-09-163-099-6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               RESULT 48
US-10-337-060-6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ð
                                                            ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ö
                                                            Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Gaps
                                                                                                                                                                                                                                                                                      APPLICANT: Alnemri, Emad S.

APPLICANT: Alnemri, Teresa
Litwack, Gerald
LITUR OF INVENTION: Apoptotic Protease Mch6, Nucleic Acids
Encoding Same and Methods of Use
                                                            ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/10/059,749
FILING DATE: 29-Jan-2002
CLASSIFICATION: «Unknown>
PRIOR APPLICATION NUMBER: US/08/865,579
FILING DATE: 29-MAY-1997
ATTORNEY/AGENT INFORMATION:
NAME: Campbell, Cathryn A.
REGISTRATION NUMBER: 31,815
REFERENCE/DOCKET NUMBER: P-ID 2180
TELEPHONE: (619) 535-9809
                  DB 1; Length 17;
57;
                                                          0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         0.3%; Score 17; DB 1; Length 17; 100.0%; Pred. No. 57;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                   CORRESPONDENCE ADDRESS:
ADDRESSEE: Campbell & Flores LLP
STREET: 4370 La Jolla Village Drive, Suite 700
              Query Match 0.3%; Score 17; DB Best Local Similarity 100.0%; Pred. No. 57; Matches 17; Conservative 0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TOPOLOGY: linear
MOLECULE TYPE: CDNA
SEQUENCE DESCRIPTION: SEQ ID NO: 5:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Fernandes-Alnemri, Teresa
                                                                                                                                                                                                                                  Sequence 5, Application US/10059749
Patent No. 6566505
GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Sequence 6, Application US/09163099; Patent No. 668459; GENERAL INFORMATION: APPLICANT: Alnemri, Emad S. APPLICANT: Fernandes-Alnemri, Te
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             STATE: California
COUNTRY: United States
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 LENGTH: 17 base pairs
                                                                                                                    1 CAGGAATTCGGCACGAG 17
                                                                                               16 CAGGAATTCGGCACGAG 32
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     INFORMATION FOR SEQ ID NO: 5:
SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        16 CAGGAATTCGGCACGAG 32
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1 CAGGAATTCGGCACGAG 17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                100.0%;
                                                                                                                                                                                                                                                                                                                                                                                                  NUMBER OF SEQUENCES: 87
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Best Local Similarity 100.
Matches 17; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CITY: San Diego
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ZIP: 92122
                                                                                                                                                                                                               US-10-059-749-5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 US-10-059-749-5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          US-09-163-099-6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Query Match
                                                                                                                                  g
                                                                                               ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ò
```

```
Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       GENERAL INFORMATION:
APPLICANT: Alnemri, Emad S.
APPLICANT: Alnemri, Emad S.
APPLICANT: Alnemri, Emad S.
APPLICANT: Ferrandaez-Alnemri, Teresa
APPLICANT: Ittwack, Gerald
APPLICANT: Intwack, Gerald
APPLICANT: Tomastrong, Robert
APPLICANT: Tomaselli, Kevin
TILE OF INVENTION: MCLBIC ACIDS ENCODING AND METHODS OF USE
TILE REFERENCE: 480140.423D2
CURRENT APPLICATION NUMBER: US/10/337,060
CURRENT APPLICATION NUMBER: US/10/337,060
CURRENT FILING DATE: 2003-01-02
NUMBER OF SEQ ID NOS: 17
SOFTWARE: FastSEQ for Windows Version 4.0
SEQ ID NO 6
LENGTH: 17
APPLICANT: Armstrong, Robert
APPLICANT: Tomaselli, Kevin
TITLE OF INVENTION: Mch3, A No. 6686459el Apoptotic Protease,
TITLE OF INVENTION: Nucleic Acids Encoding and Methods of Use
NUMBER OF SEGUENCES: 11
CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ..
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Query Match 0.3%; Score 17; DB 1; Length 17; Best Local Similarity 100.0%; Pred. No. 57; Matches 17; Conservative 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                         COMPUTER FRADABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
COMPUTER: IBM PC compatible
COMPUTER: IBM PC compatible
COMPUTER: Patentin Release #1.0, Version #1.25
SOFTWARE: Patentin Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/163,099
FILING DATE:
CLASSIFICATION:
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/556,627
FILING DATE: 13-NOV-1995
ATTORNEY/AGENT INFORMATION:
NAME: Campbell, Cathryn A.
```

APPLICANT: Cech, Thomas R.

```
Morin, Gregg B.
Harley, Calvin
Andrews, William H.
TITLE OF INVENTION: No. 6808880el Telomerase
NUMBER OF SEQUENCES: 171
CORRESPONDENCE ADDRESSS:
ADDRESSEE: Townsend and Townsend and Crew LLP
STREET: Two Embarcadero Center, 8th Floor
                                           Karen B.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               5025 AAAAAAAAAAAAA 5041
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            LENGTH: 17 base pairs
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TELEFAX: (415) 576-03
INFORMATION FOR SEQ ID NO: 132:
SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                 CITY: San Francisco
STATE: California
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       17 AAAAAAAAAAAAAA 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          (415)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    RESULT 51
US-08-319-590-23/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  STREET:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ð
                                           ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ö
                                         Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Gaps
                                                                                                                                                                                                                                                                                                                                                            Armstrong, Robert
Tomaselli, Kevin
TITLE OF INVENTION: MCHEA AND MCHS, APOPTOTIC PROTEASE,
NUCLEIC ACIDS ENCODING AND METHODS OF USE
                                           ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: LOOPPY disk
COMPUTER: COMPATIBLE
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
APPLICATION DATA:
FILING DATE: 10-Sep-2001
CLASSIFICATION: <Unknown>
DB 1; Length 17;
57;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Length 17;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CORRESPONDENCE ADDRESS:
ADDRESSEE: Seed Intellectual Property
STREET: Sulte 6300, 701 Fifth Avenue
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ATTORNEY/AGENT INFORMATION:
NAME: Christiansen, William T.
REGISTRATION NUMBER: 44,614
REFERENCE/DOCKET NUMBER: 480140.424C4
TELECOMMUNICATION INFORMATION:
TELEPHONE: (206) 622-4900
TELEPHONE: (206) 682-6031
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      NAME/KEY: misc feature
LOCATION: 1..17
OTHER INFORMATION: /note= "SK-Zap"
SEQUENCE DESCRIPTION: SEQ ID NO: 6:
Query Match 0.3%; Score 17; DB Best Local Similarity 100.0%; Pred. No. 57; Matches 17; Conservative 0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Score 17;
Pred. No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             RESULT 50
US-09-766-253-132/c
; Sequence 132, Application US/09766253
; Eatent No. 6808880
; GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                            APPLICANT: Alnemri, Emad S.
Fernandes-Alnemri,
Litwack, Gerald
                                                                                                                                                                                                       US-09-952-768-6; Sequence 6, Application US/09952768; Patent No. 6730779; GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Query Match 0.3%; Soc
Best Local Similarity 100.0%; P:
Matches 17; Conservative 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          INFORMATION FOR SEQ ID NO: 6:
SEQUENCE CHARACTERISTICS:
LENGTH: 17 base pairs
                                                                                                                        1 cassaarrcsscacsas 17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CAGGAATTCGGCACGAG 17
                                                                                                                                                                                                                                                                                                                                                                                                                                               NUMBER OF SEQUENCES: 75
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CITY: Seattle
STATE: Washington
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   OPOLOGY: linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          COUNTRY: USA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            US-09-952-768-6
                                                                                                                    g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       셤
```

```
Sequence 23, Application US/08319590
Patent No. 5646115
GENERAL INFORMATION:
GENERAL INFORMATION:
APPLICANT: WU HUNTER, SHIRLEY
APPLICANT: WALLENFELS, LYNDA
TITLE OF INVENTION: NOVEL ECTOPARASITE SALIVA PROTEINS AND TITLE OF INVENTION: APPRATUS TO COLLECT SUCH PROTEINS NUMBER OF SEQUENCES: 26
CORRESPONDENCE ADDRESS:
ADDRESSEE: SHERIDAN ROSS & MCINTOSH
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Query Match 0.3%; Score 17; DB 1; Length 17; Best Local Similarity 100.0%; Pred. No. 57; Matches 17; Conservative 0; Mismatches 0; Indels
COUNTRY: United States of America
ZIP: 9411
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC Compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.30
                                                                                                                                                                                                                                                                                           PRIOR APPLICATION DATA:

APPLICATION NUMBER: 08/846,017

FILING DATE: 1997-04-25

APPLICATION NUMBER: US 08/724,643

FILING DATE: 01-07-1996

ATTORNEY/AGENT INFORMATION:

NAME: Apple, Randolph T.

REPERFENCE/DOCKET NUMBER: 36,429

REFERENCE/DOCKET NUMBER: 15589-002920US

TELECOMMUNICATION INFORMATION:
                                                                                                                                                                                       CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/766,253
FILING DATE: 19-Jan-2001
CLASSIPICATION: «UNKNOWI»
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TOPOLOGY: BINGLE
;
SEQUENCE DESCRIPTION: SEQ ID NO: 132:
US-09-766-253-132
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   SHERIDAN ROSS & MCINTOSH
1700 LINCOLN ST., SUITE 3500
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             COUNTRY: US
ZIP: 80203
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CITY:
STATE:
```

```
5069 AGGGGGGCCCGGTACC 5085
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                5069 AGGGGGGCCCCGGTACC 5085
                                                                                                                                                                                  20 Addecedececedrace 4
   ; TOPOLOGY: linear
; MOLECULE TYPE: DNA (primer)
US-08-487-001A-23
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    MOLECULE TYPE: DNA (primer)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  20 AdddddddcccddrAcc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            17; Conservative
                                                                        Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Colorado
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  U.S.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CITY: Denver
STATE: Colorad
COUNTRY: U.S.A
ZIP: 80203
                                                                                                                                                                                                                                                         US-08-630-822A-23/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       US-08-711-905-23/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       US-08-630-822A-23
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          RESULT 54
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ઠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ;
                                                                                                                                                                                                                                                                                                                                                                                                                                                  Query Match 0.3%; Score 17; DB 1; Length 20; Best Local Similarity 100.0%; Pred. No. 69; Matches 17; Conservative 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    COUNTRY: ....

ZIP: 80203

COMPUTER READABLE FORM:
MEDLUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PACENTIN Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION WUMBER: US/08/487,001A
FILING DATE: 07-UN-1995
CLASSIFICATION: 424
ATTORNEY/AGENT INFORMATION:
NAME: Verser, Carol Talkington
REGISTRATION NUMBER: 37,459
REFERENCE/DOCKET NUMBER: 2618-17-C2
TELECOMMUNICATION INDEMATION:
TRIEPHONE: AS3-0223
         MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/319,590
                                                                                                   APPLICALLON. ...
FILING DATE:
CLASSIFICATION: 424
ATTORNEY/AGENT INFORMATION:
NAME: VERSER, CAROL TALKINGTON
REGISTRATION NUMBER: 37, 459
REFERENCE/DOCKET NUMBER: 2618-17
TELECOMMUNICATION INFORMATION:
TELEPHONE: 303/863-9700
TELEFAX: 303/863-9703
TELEFAX: 303/863-923
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          5069 AGGGGGGCCCGGTACC 5085
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              20 AGGGGGGCCCGGTACC 4
                                                                                                                                                                                                                                                                                                                                                                                              ; MOLECULE TYPE: DNA (primer) US-08-319-590-23
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TELEFAX: (303) 863-023
INFORMATION FOR SEQ ID NO: 23
SEQUENCE CHARACTERISTICS:
LENGTH: 20 base pairs
TYPE: nucleic acid
STRANDEDNESS: single
COMPUTER READABLE FORM:
                                                                                                                                                                                                                                                                                                                                                                                 linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  RESULT 52
US-08-487-001A-23/c
                                                                                                                                                                                                                                                                                                                                                                           TOPOLOGY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            g
```

```
ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ö
                                                                Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Gaps
                                                                ;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     .
0
                                                                                                                                                                                                                                                                                                                    Sequence 23. Application US/08630822A
Patent No. 5840695
GENERAL INFORMATION:
APPLICANT: FRANK, GLENN R.
APPLICANT: WALLENFELS, LYNDA
TITLE OF INVENTION: NOVEL ECTOPARASITE SALIVA PROTEINS
TITLE OF INVENTION: AND APPARATUS TO COLLECT SUCH PROTEINS
NUMBER OF SEQUENCES: 107
CORRESPONDENCE ADDRESS:
ADDRESSEE: Sheridan Ross P.C.
STREET: 1700 Lincoln Street, Suite 3500
Ouery Match 0.3%; Score 17; DB 1; Length 20; Best Local Similarity 100.0%; Pred. No. 69; Matches 17; Conservative 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 0.3%; Score 17; DB 1; Length 20; 100.0%; Pred. No. 69; 0; Indels tive 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CAPPTER BOADSLE FORM:

MEDIUM TYPE: Floppy disk
COMPUTER: Eloppy disk
COMPUTER: Eloppy disk
COMPUTER: Eloppy disk
COMPUTER: Elem PC Compatible
CORREATION SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/630,822A
FILING DATE: 11-APR-1996
CLASSIFICATION: 435
ATTORNEY/AGENT INFORMATION:
NAME: CONNELL, GARY J.
REFERENCE/DOCKET NUMBER: 2618-17-C3
TELECOMMUNICATION INFORMATION:
TELECOMMUNICATION INFORMATION:
TELECOMMUNICATION NUMBER: 2618-17-C3
TELEFAMICATION NUMBER: 2618-17-C3
TELEFAMICATION NUMBER: 2618-17-C3
TELEFAMICATION NUMBER: 2618-17-C3
TELEFAMICATION OF SEQ ID NO: 23:
SEQUENCE CHARACTERISTICS:
LENGTH: 20 base pairs
TYPE: MICLEIC acid
STRANDENNESS: Single
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Sequence 23, Application US/08711905
Patent No. 5927230
GENERAL INFORMATION:
APPLICANT: FRANK, GLENN R.
APPLICANT: WU HUNTER, SHIRLEY
APPLICANT: WALLENFELS, LYNDA
```

```
ATTORNEY/AGENT INFORMATION:
NAME: CONNELL, GARY J.
REGISTRATION NUMBER: 2618-17-C3
REFERENCE/DOCKET NUMBER: 2618-17-C3
TELECOMMUNICATION INFORMATION:
TELEPHONE: (303) 863-9700
TELEPHONE: (303) 863-923
INFORMATION FOR SEQ ID NO: 23:
SEQUENCE CHARACTERISTICS:
LENGTH: 20 base pairs
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           RESULT 56
US-09-467-642-10/c
'Sequence 10, Application US/09467642
'Petent No. 6300132
                                                                                                                                                                                                                                                                                                                                                                                                                                                     5069 AGGGGGGCCCGGTACC 5085
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 18 GGAATTCGGCACGAGGG 34
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TYPE: DNA
ORGANISM: Artificial Sequence
FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         20 GGAATTCGGCACGAGGG 4
                                                                                                                                                                                                                                                                                            , MOLECULE TYPE: DNA (primer) US-09-005-069-23
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               20 AGGGGGGGCCCCGGTACC
                                                                                                                                                                                                                                    TYPE: nucleic acid
STRANDEDNESS: single
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 San Diego
California
                                                                                                                                                                                                                                                                                   TOPOLOGY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        RESULT 57
US-08-882-046-44
                                                                                                                                                                                                                                                                                                                                                                                                                                                       ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ..
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Sequence 23, Application US/09005069

Patent No. 5332470

GENERAL INFORMATION:

APPLICANT: FRANK, GLENN R.

APPLICANT: WALLENFELS, LYNDA

TITLE OF INVENTION: NOVEL ECTOPRASITE SALIVA PROTEINS

TITLE OF INVENTION: AND APPARATUS TO COLLECT SUCH PROTEINS

NUMBER OF SEQUENCES:

ADDRESSEE: Sheridan ROSS P.C.
TITLE OF INVENTION: NOVEL ECTOPARASITE SALIVA PROTEINS AND TITLE OF INVENTION: APPARATUS TO COLLECT SUCH PROTEINS NUMBER OF SEQUENCES: 26
CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      0.3%; Score 17; DB 1; Length 20; 100.0%; Pred. No. 69; tive 0; Mismatches 0; Indels
                                                                                                                                                                                                       COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/711,905
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  OPERATING YEAR COMPOSITION OPERATING YEAR PC-DOS/MS-DOS SOFTWARE: PatentIn Release #1.0, Version #1.25 CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/005,069
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       E: Sheridan Ross P.C.
1700 Lincoln Street, Suite 3500
                                                                             ADDRESSEE: SHERIDAN ROSS & MCINTOSH
STREET: 1700 LINCOLN ST., SUITE 3500
CITY: DENVER
STATE: CO
COUNTRY: USA
ZIP: 80203
                                                                                                                                                                                                                                                                                                                                      APPLICATION:
FILING DATE:
CLASSIFICATION:
ATTORNEY/AGENT INPORMATION:
NAME: VERSER, CAROL TALKINGTON
REGISTATION UNDRER: 37,459
REFERENCE/DOCKET NUMBER: 2618-17
TELECOMMUNICATION INFORMATION:
TELECOMMUNICATION INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CLASSIFICATION:
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 08/630,822
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             5069 AGGGGGGCCCGGTACC 5085
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           INFORMATION FOR SEQ ID NO: 23: SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     20 AGGGGGGCCCGGTACC 4
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          MOLECULE TYPE: DNA (primer)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                17; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      LENGTH: 20 base pairs
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              nucleic acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Best Local Similarity
Matches 17; Conserval
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        STATE: Colorado
COUNTRY: U.S.A.
ZIP: 80203
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                STREET: 1700 I
CITY: Denver
STATE: Colorad
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         STRANDEDNESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   RESULT 55
US-09-005-069-23/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              US-08-711-905-23
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ઠે
```

```
GENERAL INFORMATION:

APPLICANT: Brett P. Monia

APPLICANT: Lex M. Cowsert

APPLICANT: Lex M. Cowsert

APPLICANT: Lex M. Cowsert

TITLE OF INVENTION: ANTISENSE MODULATION OF TELOMERIC REPEAT BINDING FACTOR 2 EXPRESS

CURRENT APPLICATION NUMBER: US/09/467,642

CURRENT FILING DATE: 1999-12-20

NUMBER OF SEQ ID NOS: 89

SEQ ID NO 10

LENGTH: 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ö
                                                                                ö
                                                                                Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Gape
                                                                                ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Sequence 44, Application US/08882046

Patent No. 6136952

GENERAL INFORMATION:

GENERAL INFORMATION:

APPLICANT: Li. Linheng

APPLICANT: Krantz, lan D.

TITLE OF INVENTION: Human Jagged Polypeptide, Encoding

TITLE OF INVENTION: Nucleic Acids and Methods of Use

NUMBER OF SEQUENCES: 110

CORRESPONDENCE ADDRESS:

ADDRESSEE: Campbell & Flores LLP
                               Length 20;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Query Match 0.3%; Score 17; DB 1; Length 20; Best Local Similarity 100.0%; Pred. No. 69; Matches 17; Conservative 0; Mismatches 0; Indele
                                                                                0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       E: Campbell & Flores LLP
4370 La Jolla Village Drive, Suite 700
                            Score 17; DB 1;
Pred. No. 69;
Query Match 0.3%; Score 17; UB
Best Local Similarity 100.0%; Pred. No. 69;
Alematches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ) OTHER INFORMATION: Antisense Oligonucleotide US-09-467-642-10
```

```
Sequence 52, Application US/08980071

Sequence 52, Application US/08980071

Patent No. 53443108

GENERAL INPORMATION:
APPLICANT: Gliner, Any Jelen
APPLICANT: Metus, Anne-Marie Light
TITLE OF INVENTION: TRANSGENIC PLANTS EXPRESSING
TITLE OF INVENTION: LEPIDOPTERAN-ACTIVE-DELTA-ENDOTOXINS
NUMBER OF SEQUENCES: 76
CORRESPONDENCE ADDRESS:
ADDRESSEE: Arnold, White & Durkee
STERT: P.O. Box 4433
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Query Match 0.3%; Score 16.8; DB 1; Length 20; Best Local Similarity 90.0%; Pred. No. 74; Matches 18; Conservative 0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    COMPUTER: V.A.L. COMPUTER: V.A.L. COMPUTER: Floppy disk MEDIUM TYPE: Floppy disk COMPUTER: IBM PC COMPATIBLE COMPUTER: IBM PC COMPATIBLE COPERATING SYSTEM: PC-DOS/MS-DOS SOFTWARE: PATENTIN Release #1.0, Version #1.30 CURRENT APPLICATION DATA: APPLICATION NUMBER: US/08/980,071 FILING DATE: COMCUTENTLY HERWITH CLASSIFICATION: 435 PRICK APPLICATION WHERE: US 08/757,536 FILING DATE: 27-NOV-1996 ATTORNEY/AGENTINFORMATION:
REGISTRATION NUMBER: 31,815
REFERENCE/DOCKET NUMBER: P-UW 4164
TELECOMMUNICATION INFORMATION:
TELEPHONE: (858) 535-9001
TELEPAX: (858) 535-9001
TELEPAX: (858) 535-8049
INFORMATION FOR SEQ ID NO: 44:
SEQUENCE CHARACTERISICS:
LENGTH: 20 base pairs
TYPE: nucleic acid
STRANDENESS: single
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       LOCATION: 11..20
; SEQUENCE DESCRIPTION: SEQ ID NO: 44:
US-09-566-047-44
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              NAME: Kitchell, Barbara S.
REGISTRATION NUMBER: 33,928
REGISTRATION NUMBER: 33,928
TELECOMMUNICATION INFORMATION:
TELEPHONE: 512/418-3000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  622 TATTTTCAGATATTCATGA 641
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TELEFAX: 512/4/4-7577

INFORMATION FOR SEQ ID NO: 5
SEQUENCE CHARACTERISTICS:
LENGTH: 22 base pairs
TYPE: nucleic acid
STRANDEDNESS: single
                                                                                                                                                                                                                                                                                                                                                                                                                                       intron
                                                                                                                                                                                                                                                                                                                                         TOPOLOGY: linear MOLECULE TYPE: cDNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 NAME/KEY: exon
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TOPOLOGY: linear
                                                                                                                                                                                                                                                                                                                                                                                                                                NAME/KEY:
LOCATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CITY: Houston
STATE: Texas
COUNTRY: USA
ZIP: 77210
                                                                                                                                                                                                                                                                                                                                                                                                         FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   FEATURE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   APPLICANT: Li, Linheng
Hood, Leroy
Krantz, Ian D.
Spinner, Nancy B.
TITLE OF INVENTION: Methods of Diagnosing Alagille Syndrome
NUMBER OF SEQUENCES: 110
CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       .;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ADDRESSEE: Campbell & Flores Lip
ADDRESSEE: Campbell & Flores Lip
STREET: 4370 La Jolla Village Drive, Suite 700
CITY: San Diego
STRATE: California
COUNTRY: USA
ZIP: 92122
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
OSTWARE: Patentin Release #1.0, Version #1.25
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        DB 1; Length 20;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Indels
                                                           CONTINUED TO THE TELEGRAPH OF TELEGR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/882,046
FILING DATE: 25-JUN-1997
ATTORNEY/AGENT INFORMATION:
NAME: Campbell, Cathryn A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           0.3%; Score 16.8; D
90.0%; Pred. No. 74;
tive 0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CURRENT APPLICATION DATA:
REPLICATION NUMBER: US/09/566,047
FILING DATE: 05-May-2000
CLASSIPICATION: <Unknown>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Sequence 44, Application US/09566047
Patent No. 6703198
GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          622 TATTTTCAGATATTCATGA 641
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1 TATTTTTAGATATTAATGA 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Query Match
Best Local Similarity 90.0
Matches 18; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TOPOLOGY: linear MOLECULE TYPE: CDNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             intron
1..10
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             NAME/KEY:
LOCATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ; NAME/KEY:
; LOCATION:
US-08-882-046-44
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          RESULT 58
US-09-566-047-44
```

g ò

ö

Gaps

```
to Lepidopteran Insects and Methods for
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                0.3%; Score 16.8; DB 1; Length 22; 90.0%; Pred. No. 82; tive 0; Mismatches 2; Indel8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Sequence 52, Application US/09250848

Sequence 52, Application US/09250848

Patent No. 6153814

GENERAL INPORMATION:
APPLICANT: Baum, James A.
APPLICANT: Glimer, Amy Jelen
APPLICANT: Mettus, Anne-Marie Light
TITLE OF INVENTION: Bacillus thutinglensis CrylC
TITLE OF INVENTION: Compositions Toxic to Lepidopter;
TITLE OF INVENTION: Making CrylC Mutants
NUMBER OF SEQUENCES:
CORRESPONDENCE ADDRESS:
ADDRESSEE: Arnold, White and Durkee
STREET: P.O. Box 4433
                                                                                                                                                   ZIP: 77210

COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.30

CURRENT APPLICATION NUMBER: US/09/314,093
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          COUNTRY: USA
ZIP: 77210-4433
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC COMpatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/250,848
                       CORRESPONDENCE ADDRESS:
ADDRESSEE: Arnold, White & Durkee
STREET: P.O. Box 4433
                                                                                                                                                                                                                                                                                                                                                                CLASSIFICATION:
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 08/980,071
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1 GGATCCCCCGGGCTGCAGGA 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1 GGATCCCTCGAGCTGCAGGA 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                    ATTORNEY/AGENT INFORMATION:
NAME: Kitchell, Barbara S.
REGISTRATION NUMBER: 33,928
REFERENCE/DOCKET NUMBER: MEC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TELEFAX: 512/474-7577
INFORMATION FOR SEQ ID NO:
SEQUENCE CHARACTERISTICS:
LENGTH: 22 Dase pairs
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               18; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               nucleic acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  FILING DATE:
CLASSIFICATION:
PRIOR APPLICATION DATA:
    NUMBER OF SEQUENCES:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Best Local Similarity
Matches 18; Conserva
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CITY: Houston
STATE: TX
                                                                                           Houston
                                                                                                                     Техав
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         STRANDEDNESS
                                                                                                                                                                                                                                                                                                                                                                                                                                      FILING DATE:
                                                                                                                                                                                                                                                                                                                                             FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TELEPHONE:
                                                                                                              STATE: Te
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     US-09-314-093-52
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               US-09-250-848-52
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      셤
                                                                                                                                                                                                                                                                              Sequence 52, Application US/08757536

Sequence 52, Application US/08757536

Sequence 52, Application US/08757536

Sequence 52, Application US/08757536

GENERAL INFORMATION:
APPLICANT: Baum, James A.
APPLICANT: Mettus, Anne-Marie Light
TITLE OF INVENTION: Bacillus thuringlensis CrylC
TITLE OF INVENTION: Making CrylC Mutants
NUMBER OF SEQUENCES: 57
CORRESPONDENCE ADDRESS:
ADDRESSE: ANDDRESSES:
ADDRESSES: Annold, White and Durkee
STREET: P.O. Box 4433
CITY: Houston
                                                                                           ô
                                                                                           Gaps
                                                                                           ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ô
                                     Query Match

0.3%; Score 16.8; DB 1; Length 22;
Best Local Similarity 90.0%; Pred. No. 82;
Matches 18; Conservative 0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      DB 1; Length 22;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Sequence 52, Application US/09314093
| Patent No. 6033874
| GENERAL INFORMATION:
| APPLICANT: Baum, James A. APPLICANT: Gilmer, Amy Jelen APPLICANT: Mettus, Anne-Marie Light APPLICANT: Mettus, TRANSGENIC PLANTS EXPRESSING TITLE OF INVENTION: LEPIDOPTERAN-ACTIVE-DELTA-ENDOTOXINS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  COMPUTE: IBM PC compatible
COMPUTE: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/757,536
FILING DATE: CONCURRENTLY HEREWITH
CLASSIFICATION: 800
ATTORNEY AGENT INFORMATION:
NAME: Kitchell, Barbara
REPERENCE/DOCKET NUMBER: MOBT:023
TELECOMMUNICATION INFORMATION:
TELECOMMUNICATION INFORMATION:
TELECOMMUNICATION INFORMATION:
TELECOMMUNICATION SEQ 1D NO: 52:
SEQUIDOR CRAACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  0.3%; Score 16.8; D: 90.0%; Pred. No. 82; tive 0; Mismatches
                                                                                                                                   1 GGATCCCCCGGGCTGCAGGA 20
                                                                                                                                                                             1 GGATCCCTCGAGCTGCAGGA 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1 GGATCCCCCGGGCTGCAGGA 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Query Match
Best Local Similarity 90.0 Matches 18; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              22 base pairs
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TYPE: nucleic acid
STRANDEDNESS: single
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ZIP: 77210-4433
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       USA
US-08-980-071-52
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 US-09-314-093-52
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       US-08-757-536-52
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       COUNTRY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            LENGTH:
                                                                                                                                                                         셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ð
                                                                                                                                   ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   셤
```

```
Gaps
                              Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ö
                              ;
0
                                                                                                                                                                                                                                                          APPLICANT: Baum, James A.

Gilmer, Amy Jelen
Mettus, Anne-Marie Light
TITLE OF INVENTION: LEPIDOPTERAN-ACTIVE-DELTA-ENDOTOXINS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Length 22;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Sequence 52, Application US/09337280
Patent No. 6423828
GENERAL INFORMATION:
APPLICANT: Ball, James A.
APPLICANT: Gilmer, Amy Jelen
APPLICANT: Mettus, Anne-Marie Light
TITLE OF INVENTION: LEPIDOPTERAN-ACTIVE-DELTA-ENDOTOXINS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Indels
                              Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      SOFTWARE: Patentin Release #1.0, Version #1.30
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       2;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Score 16.8; DB 1;
Pred. No. 82;
          red. No. 82;
Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ATTORNEY/AGENT INFORMATION:
NAME: Kitchell, Barbara S.
REGISTRATION NUMBER: 33,928
REFERENCE/DOCKET NUMBER: MECO:206
TELECOMMUNICATION INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/337,635
FILING DATE: 21-Jun-199
CLASSIFICATION: <Unknown>
                                                                                                                                                                                                                                                                                                                                                                                          ADDRESSEE: Arnold, White & Durkee STREET: P.O. Box 4433
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  COMPUTER: IBM PC COMPATIBLE OPERATING SYSTEM: PC-DOS/MS-DOS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TOPOLOGY: linear SEQUENCE DESCRIPTION: SEQ ID NO: 52: US-09-337-635-52
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        PRIOR APPLICATION DATA:
APPLICATION NUMBER: 08/980,071
              Pred. No.
                                                                                                                                                                                                      Sequence 52, Application US/09337635
Patent No. 6313378
GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ZIP: 77210
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TELEPHONE: 512/418-3000
TELEFAX: 512/474-7577
INFORMATION FOR SEQ ID NO: 52:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1 GGATCCCCGGGCTGCAGGA 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   gearcercaacrecada 20
90.0%; Pic.
                                                                      1 GGATCCCCCGGGCTGCAGGA 20
                                                                                                          1 ggarcccrcgagcrgcagga 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               FILING DATE: <Unknown>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       LENGTH: 22 base pairs
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TYPE: nucleic acid
STRANDEDNESS: single
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     0.3%;
                                                                                                                                                                                                                                                                                                                                                          NUMBER OF SEQUENCES: 76
                                                                                                                                                                                                                                                                                                                                                                              CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Query Match
Best Local Similarity 90.0'
Matches 18; Conservative
                                  18; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                        STATE: Texas
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          COUNTRY: USA
              Best Local Similarity
Matches 18; Conserva
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 US-09-337-280-52
                                                                                                                                                                                        US-09-337-635-52
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             RESULT 65
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Š
                                                                                                              g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    APPLICANT: Baum, James A.
APPLICANT: Gilmer, Amy Jelen
APPLICANT: Gilmer, Anne-Marie Light
TITLE OF INVENTION: Bacillus thuringiensis CrylC
TITLE OF INVENTION: Compositions Toxic to Lepidopteran Insects and Methods for
TITLE OF INVENTION: Making CrylC Mutants
                                                                                                                                                                                                                                                                                                                                                                                    ö
                                                                                                                                                                                                                                                                                                                                                                                      Gaps
                                                                                                                                                                                                                                                                                                                                                                                    ;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         0.3%; Score 16.8; DB 1; Length 22;
                                                                                                                                                                                                                                                                                                                                              DB 1; Length 22;
                                                                                                                                                                                                                                                                                                                                                                                    2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           SOFTWARE: Patentin Release #1.0, Version #1.30 CURENT APPLICATION DATA:
APPLICATION NUMBER: US/09/251,885
                                                                                                                                                                                                                                                                                                                                                ; Score 16.8; DB
; Pred. No. 82;
0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             FILING DATE:
FILING DATE:
RICHOELI, BALDAZA
REGISTRATION NUMBER: 33,928
REFERENCE/DOCKET NUMBER: 33,928
TELECOMUNICATION INFORMATION:
TELEPHONE: (512) 418-3000
TELEFAX: (512) 414-3000
TELEFAX: (512) 474-7577
INFORMATION FOR SEQ ID NO: 52:
SEQUENCE CHARACTERISTICS:
                                                                            NAME: Kitchell, Barbara
REGISTRATION NUMBER: 33,928
REPERENCE/DOCKET NUMBER: MOBT:023
TELEPHONE: (512) 474-757
INFORMATION FOR SEQ ID NO: 52: SEQUENCE CHARACTERISTICS: LENGAL 22 Base pairs
TYPE: nucleic acid
STRANDEDNESS: single
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CORRESPONDENCE ADDRESS:
ADDRESSEE: Arnold, White and Durkee
STREET: P.O. Box 4433
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CLASSIFICATION:
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US/08/757,536
                        US/08/757,536
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Sequence 52, Application US/09251885; Patent No. 6177615; GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                          1 GGATCCCCCGGGCTGCAGGA 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                1 gdarcccrcdagcrdcagda 20
                                                                                                                                                                                                                                                                                                                                                  0.3%;
                                                            ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                  Query Match
Best Local Similarity 90.03
Matches 18; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           LENGTH: 22 base pairs
TYPE: nucleic acid
STRANDEDNESS: single
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     COUNTRY: USA
ZIP: 77210-4433
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy o
                        APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       NUMBER OF SEQUENCES:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     linear
                                                                                                                                                                                                                                                                                              linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     STREET: F.C.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           US-09-251-885-52
                                                                                                                                                                                                                                                                                                  TOPOLOGY:
                                                                                                                                                                                                                                                                                                                US-09-250-848-52
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                US-09-251-885-52
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          RESULT 63
```

ò

```
ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ô
                                                                                                                                                                                                                                                                                                                                                                                                                DB 1; Length 22;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  DB 1; Length 22;
                                                                                                                                                                                                                                                                                                                                                                                                                                                          2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  OTHER INFORMATION: Synthetic oligonucleotide
                                                                                                                                                                                                                                                                                                                                                                                                            Query Match 0.3%; Score 16.8; I
Best Local Similarity 90.0%; Pred. No. 82;
Matches 18; Conservative 0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                0.3%; Score 16.8; C
90.0%; Pred. No. 82;
tive 0; Mismatches
                                                                                        NAME: Kitchell, Barbara S.
REGISTRATION NUMBER: 33,928
REFERENCE/DOCKET NUMBER: MECO:206
                                                                                                                                                                                                                                                                                                        ; TOPOLOGY: linear
; SEQUENCE DESCRIPTION: SEQ ID NO: 52:
US-09-972-175-52
                          APPLICATION NUMBER: 09/337,635
FILING DATE: <Unknown>
                                                                                                                                                    TELECOMMUNICATION INFORMATION
TELEPHONE: 512/418-3000
TELEFAX: 512/474-7577
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Sequence 52, Application US/10200522 Patent No. 6825006
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1 GGATCCCCCGGGCTGCAGGA 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1 GGATCCCTCGAGCTGCAGGA 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1 GGATCCCCGGGCTGCAGGA 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Sequence 2, Application US/09904744
Patent No. 6828142
GENERAL INFORMATION:
APPLICANT: Barbera-Guillem, Emilio
APPLICANT: Nelson, M. Bud
                                                                    ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                              LENGTH: 22 base pairs
                                                                                                                                                                                                                                                                                TYPE: nucleic acid
STRANDEDNESS: single
                                                                                                                                                                                                                  INFORMATION FOR SEQ ID NO: 52:
SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TYPE: DNA
ORGANISM: Artificial Sequence
        PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            18; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            RESULT 68
US-09-904-744-2/C
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                US-10-200-522-52
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        US-10-200-522-52
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         APPLICANT: Burm, James A.
Glimer, Amy Jelen
Glimer, Anne-Marie Light
Mettus, Anne-Marie Light
TITLE OF INVENTION: TRANSCENIC PLANTS EXPRESSING
LEPIDOPTERAN-ACTIVE-DELTA-ENDOTOXINS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    DB 1; Length 22;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/972,175
FILING DATE: 05-Oct-2001
CLASSIFICATION: <unknown>
                                                                                                                                                             COMPUTER: 7/21B
COMPUTER: FALOABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PATEMET PC-DOS/MS-DOS
SOFTWARE: PATEMET Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/337,280
FILING DATE:
CLASSIFICATION:
PRIOR APPLICATION NUMBER: US/08/980,071
FILING DATE:
APPLICATION NUMBER: US/08/980,071
FILING DATE:
APPLICATION NUMBER: US/08/980,071
FILING DATE:
APPLICATION NUMBER: 33,928
REFERENCE/DOCKET NUMBER: 33,928
REFERENCE/DOCKET NUMBER: MECO:206
TELECOMMUNICATION INFORMATION:
TELEPHONE: 512/418-1000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Query Match 0.3%; Score 16.8; E
Best Local Similarity 90.0%; Pred. No. 82;
Matches 18; Conservative 0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CORRESPONDENCE ADDRESS:
ADDRESSEE: Arnold, White & Durkee
STREET: P.O. Box 4433
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sequence 52, Application US/09972175
Patent No. 6809078
GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1 GGATCCCCCGGGCTGCAGGA 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1 GGATCCCTCGAGCTGCAGGA 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CITY: Houston
STATE: Texas
COUNTRY: USA
ZIP: 77210
COMPUTER READABLE FORM:
NUMBER OF SEQUENCES: 76
CORRESPONDENCE ADDRESS:
ADDRESSE: Arnold, Whit
STREET: P.O. Box 4433
CITY: HOUSTON
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TELEFAX: 512/474-7577 INFORMATION FOR SEQ ID NO:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  SEQUENCE CHARACTERISTICS:
LENGTH: 22 base pairs
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            NUMBER OF SEQUENCES:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TYPE: nucleic acid
STRANDEDNESS: single
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      linear
                                                                                                                                USA
                                                                                                                           COUNTRY: U
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          US-09-337-280-52
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  US-09-972-175-52
                                                                                                            STATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         g
```

```
GENERAL INFORMATION:
APPLICANT: Baum, James A.
APPLICANT: Baum, James A.
APPLICANT: Gilmer, Amy Jolen
APPLICANT: Gilmer, Amy Jolen
TITLE OF INVENTION: NUCLEIC ACID AND POLYPEPTIDE COMPOSITIONS ENCODING LEPIDOPTERAN-TC
TITLE OF INVENTION: POLYPEPTIDES
TITLE OF INVENTION: POLYPEPTIDES
FILE REFERENCE: MECO:213 (11792.0213 DVUS01)
CURRENT FILING DATE: 2002-07-22
PRIOR PPLICATION NUMBER: 09/337,280
PRIOR PPLICATION NUMBER: 09/337,280
PRIOR PLILNG DATE: 1999-66-22
PRIOR APPLICATION NUMBER: 08/980,071
PRIOR APPLICATION NUMBER: 08/980,071
PRIOR APPLICATION NUMBER: 08/980,11-27
NUMBER OF SEQ ID NOS: 76
SOFTWARE: Patentin version 3.1
SEQ ID NO 52
LENGTH: 22
ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ö
Gapa
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Gарв
```

```
gequence 29, Application US/USDS1120A

Betent No. 6642169

GENERAL INFORMATION:
APPLICANT: HERRANAN, Bernhard
APPLICANT: KISPERT, Andreas
TITLE OF INVENTION: NUCLEC ACIDS INVOLVED IN THE RESPONDER PHENOTYPE AND APPLICATION NUMBER: US/09/554,726A
TITLE OF INVENTION: THEREOF
FILE REFERENCE: 258.0009 0101
CURRENT PILLING DATE: 2000-05-18
PRIOR APPLICATION NUMBER: PCT/EP 98/07395
PRIOR APPLICATION NUMBER: EP 98 10 3596.7
PRIOR PILLING DATE: 1998-011-18
PRIOR FILING DATE: 1998-11-18
NUMBER OF SEQ ID NOS: 53
SOFTWARE: PRIOR PILLING DATE: 1997-11-18
NUMBER OF SEQ ID NOS: 53
SEQ ID NO 29
LENGTH: 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ..
0
                                                                                                                                                                                                                              ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Gaps
                                                                                                                                                                                                                              Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ö
                                                                                                                                                                                                                              .;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        APPLICANT: Vol., Marie-Claude
APPLICANT: Brewer, Carl
APPLICANT: Brewer, Carl
APPLICANT: Morgan, Kenneth
APPLICANT: Gaudet, Daniel
APPLICANT: Hudson, Thomas
TITLE OF INVENTION: Very Low Density Lipoprotein Receptor
TITLE OF INVENTION: Very Low Density Lipoprotein Receptor
FILE REFRENCE: 2855.2001-001
CURRENT APPLICATION NUMBER: US/09/802,320A
CURRENT FILING DATE: 2000-03-08
PRIOR PILING DATE: 2000-03-08
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         DB 1; Length 20;
                                                                                                                                                                              Length 20;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1; Indels
                                                                                                                                                                                                                              Indels
                                                                                                                                                                                     DB 1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ; Score 16.4; DB; Pred. No. 83; 0; Mismatches
SEQ ID NO 57
LENGTH: 20
TYPE: DNA
TYPE: DNA
FRANTISM: Artificial Sequence
FRATURE:
OTHER INFORMATION: Antisense Oligonucleotide
                                                                                                                                                                              Score 16.4; Pred. No. 83;
                                                                                                                                                                                                                              0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             US-09-802-320A-22/c
; Sequence 22, Application US/09802320A
; Patent No. 6833240
                                                                                                                                                                                                                                                                                                                                                                                               RESULT 71
US-09-554-726A-29
; Sequence 29, Application US/09554726A
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       3412 CAGCAAAAGCGGGAGCAG 3429
                                                                                                                                                                                                                                                                            4106 GTCATCCTTCCAGGCTC 4123
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    3 CAGCAAAAGCAGGAGCAG 20
                                                                                                                                                                                                                                                                                                                       1 Grearcereceaedere 18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        APPLICANT: Engert, James
APPLICANT: Vohl, Marie-Claude
                                                                                                                                                                                     0.3%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Query Match 0.3%;
Best Local Similarity 94.4%;
Matches 17; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TYPE: DNA
ORGANISM: Artificial Sequence
                                                                                                                                                                                     Query Match 0.33
Best Local Similarity 94.4
Matches 17; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         OTHER INFORMATION: Primer US-09-554-726A-29
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  GENERAL INFORMATION:
                                                                                                                                        US-09-844-634-57
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      g
                                                                                                                                                                                                                                                                                   ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Sequence 57, Application US/09844634
Sequence 57, Application US/09844634
Sequence 57, Application US/09844634
GENERAL INFORMATION:
Bether No. 6410324
GENERAL INFORMATION:
APPLICANT: Andrew T. Watt
APPLICANT: Andrew T. Watt
TITLE OF INVENTION: ANTISENSE MODULATION OF TUMOR NECROSIS FACTOR RECEPTOR 2 EXPRESSIFILE REFERENCE: RTS-0216
CURRENT APPLICATION UMBER: US/09/844,634
CURRENT PLING DATE: 2001-04-27
NUMBER OF SEQ ID NOS: 174
       APPLICANT: Castro, Stephanie
TITLE OF INVENTION: Nanocrystals having polynucleotide strands and their use to form
TITLE OF INVENTION: dendrimers in a signal amplification system
FILE REPREBLOCE: B-73
CURRENT PILING DATE: 2001-07-13
PRIOR PAPLICATION NUMBER: 09/437076
PRIOR PAPLICATION NUMBER: 09/437076
PRIOR PLING DATE: 1999-11-09
PRIOR FILING DATE: 1999-11-10
NUMBER OF SEQ ID NOS: 6
SOFTWARE: Patentin version 3.0
SEQ ID NO 2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      .;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Length 19;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         DB 1; Length 18;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sequence 31, Application US/09308003
Sequence 31, Application US/09308003
Patent No. 6326170
GENERAL INPORMATION:
APPLICANT: Burnham, Martin K. R.
APPLICANT: Lonetto, Michael A.
TITLE OF INVENTION: PARINE, V.
TITLE OF INVENTION: POLYPEPTIDES AND THEIR USES
FILE REPERENCE: GMN 1093
CURRENT APPLICATION NUMBER: US/09/308,003
CURRENT FILING DATE: 1999-05-10
EARLIER PRILING DATE: 1997-09-12
NUMBER OF SEQ ID NOS: 52
SOFTWARE: PASSEG for Windows Version 3.0
LENGTH: 19
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           DB 1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Score 16.4;
Pred. No. 78;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Ouery Match
0.3%; Score 16.4;
Best Local Similarity 94.4%; Pred. No. 73
Matches 17; Conservative 0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    5050 AAAAAAAAAAAAACTC 5067
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ORGANISM: Staphylococcus aureus US-09-308-003-31
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         18 GGAATTCGGCACGAGGGG 35
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1 GGAATTCGGCACGAGCGG 18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               18 AAAAAAAAAAAAAACCC 1
                                                                                                                                                                                                                                                                                                                                                                                                      ; OTHER INFORMATION: synthesized US-09-904-744-2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           0.3%;
milarity 94.4%;
Conservative
                                                                                                                                                                                                                                                                                                                                                           ORGANISM: Artificial Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         RESULT 70
US-09-844-634-57
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    RESULT 69
US-09-308-003-31
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TYPE: DNA
                                                                                                                                                                                                                                                                                                                                        TYPE: DNA
```

g

a

```
RESULT 76
US-09-685-664B-1075/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ઠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  셤
                                                                                                                                                                                                  ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ; OTHER INFORMATION: G allele fragment of hypothetical sequence of Fig. 37.
US-10-105-101A-23
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Gaps
                                                                                                                                                                                                    ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ö
                                                                                                                                                             DB 1; Length 21;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               DB 1; Length 21;
                                                                                                                                                                                                  Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                     APPLICANT: Variagenics, Inc
TITLE OF INVENTION: A Method for Identifying Polymorphisms
FILE REFERENCE: 272/160
CURRENT APPLICATION NUMBER: US/10/105,101A
CURRENT FILING DATE: 2002-09-30
NUMBER OF SEQ ID NOS: 25
SOFFWARE: Patentin version 3.1
SEQ ID NO 23
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ADDRESSEE: Townsend and Townsend and Crew LLP STREET: Two Embarcadero Center, 8th Floor CITY: San Francisco
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Morin, Gregg B.
Harley, Calvin
Andrews, William H.
TITLE OF INVENTION: NO. 6808880el Telomerase
NUMBER OF SEQUENCES: 171
CORRESPONDENCE ADDRESS:
                                                                                                                                                      Query Match 0.3%; Score 16.4; D
Best Local Similarity '85.0%; Pred. No. 87;
Matches 17; Conservative 1; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           0.3%; Score 16.2; Dilarity 85.7%; Pred. No. 92; Conservative 0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      STATE: California COUNTRY: United States of America ZIP: 94111 COMPUTER READABLE FORM:
NUMBER OF SEQ ID NOS: 22
SOFTWARE: FaetSEQ for Windows Version 4.0
SEQ ID NO 22
LENGTH: 21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           3757 GGTGCTGTCCAGCTTCTTGGA 3777
                                                                                                                                                                                                                                                                                                                                                           US-10-105-101A-23/c
; Sequence 23, Application US/10105101A
Patent No. 6825009
; GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Sequence 131, Application US/09766253
Patent No. 680880
GENERAL INFORMATION:
APPLICANT: Cech, Thomas R.
Lingner, Joachim
Nakamura, Toru
Chapman, Karen B.
                                                                                                                                                                                                                                         3576 TGAACACTCACTTTTTGCAA 3595
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 21 GGrecrerceAgrirereceA 1
                                                                                                                                                                                                                                                                20 TGAACACTCRGTCTTTGCAA 1
                                                                            ; TYPE: DNA; ORGANISM: Homo sapiens
US-09-802-320A-22
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TYPE: DNA ORGANISM: Artificial
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Query Match
Best Local Similarity
Matches 18; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               US-09-766-253-131
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             RESULT 74
                                                                                                                                                                                                                                         ò
                                                                                                                                                                                                                                                                        a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ઠે
```

```
APPLICANT: ENGWiggen, Jim
APPLICANT: Stinchcomb, Dan
APPLICANT: Stinchcomb, Dan
APPLICANT: Stinchcomb, Dan
APPLICANT: Stinchcomb, Dan
APPLICANT: Bacobedo, Jaime
APPLICANT: Bacobedo, Jaime
TITLE OF INVENTION: Levels of Vascular Endothelial Growth Factor Recptor
TITLE OF INVENTION: Levels of Vascular Endothelial Growth Factor Recptor
FILE REFERENCE: MBHB00-876-K (400/021)
CURRENT APPLICATION NUMBER: US/09/685,664B
PRIOR FILING DATE: 1995-10-26
PRIOR FILING DATE: 1995-10-26
PRIOR FILING DATE: 1996-01-08
PRIOR PLICATION NUMBER: US 09/371,772
PRIOR FILING DATE: 1996-01-08
PRIOR FILING DATE: 1996-01-08
PRIOR FILING DATE: 1996-01-08
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ô
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Length 16;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               0.3%; Score 16; DB 1; Length 17;
100.0%; Pred. No. 77;
tive 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      0; Indels
                                                                PRIOR APPLICATION DATA:

APPLICATION NUMBER: 08/846,017

FILING DATE: 1997-04-25

APPLICATION NUMBER: 08 08/724,643

FILING DATE: 01-0CT-1996

ATTORNEY/AGENT INFORMATION:

RAME: Apple, Randolph T.

REGISTRATION NUMBER: 36,429

REFERENCE/DOCKET UNBER: 015389-002920US

TELECOMMUNICATION INFORMATION:

TELEPHONE: (415) 576-0200
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  DB 1;
72;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Query Match 0.3%; Score 16; DB Best Local Similarity 100.0%; Pred. No. 72; Matches 16; Conservative 0; Mismatches
APPLICATION NUMBER: US/09/766,253
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ) SEQUENCE DESCRIPTION: SEQ ID NO: 131: US-09-766-253-131
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 APPLICANT: Ribozyme Pharmaceuticals, Inc. APPLICANT: Pavco, Pam
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 US-09-685-664B-1074/c
; Sequence 1074, Application US/09685664B
; Patent No. 6818447
                                                   <Unknown>
                                                                                                                                                                                                                                                                                                                                              TELEFAX: (415) 576-0300 INFORMATION FOR SEQ ID NO: 131:
                                                                                                                                                                                                                                                                                                                                                                                                SEQUENCE CHARACTERISTICS:
LENGTH: 16 base pairs
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        5025 AAAAAAAAAAAAA 5040
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    5025 AAAAAAAAAAAAAA 5040
                                                                                                                                                                                                                                                                                                                                                                                                                                                    TYPE: nucleic acid
STRANDEDNESS: single
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            NUMBER OF SEQ ID NOS: 8231
SOFTWARE: Patentin version 3.0
SEQ ID NO 1074
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1 AAAAAAAAAAAAA 16
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   17 AAAAAAAAAAAAA 2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Query Match 0.33
Best Local Similarity 100.
Matches 16; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      16; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        варіепв
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ) ORGANISM: Homo E
US-09-685-664B-1074
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TYPE: RNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Matches
```

```
APPLICANT: Ishiwata, Tetsuyoshi, Sakurada, Mikiko; Nishimura,
APPLICANT: Ishiwata, Tetsuyoshi, Sakusada, APPLICANT: Ayako; Nakagawa, Satoshi, Nishi, Tatsunari; Kuga, Tetsuro; Sawada,
APPLICANT: Shigemasa; Takei, Masami
ITILE OF INVENTION: IgA Nephropathy-Related Genes
NUMBER OF SEQUENCES: 111
CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ö
                                                                                                                                                                                                                                                                                                     ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Gaps
                                                                                                                                                                                                                                                                                                     Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  .
0
                                                                                                                                                                                                                                                                                                     ;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Length 17;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            0; Indels
                                                                                                                                                                                                                                                 Length 17;
                                                                                                                                                                                                                                                                                                     Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   STATE: NOW YORK
ZTP: 10112-3801
COMPUTER READABLE FORM:
MEDIUM TYPE: Diskette, 3.50 inch, 1.44 Mb storage COMPUTER: Compaq PC
OPERATING SYSTEM: Windows 95
SOFTWARE: WordPerfect 8.0
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/090,672B
FILING DATE: 04-JUNE-1998
FILING DATE: 05-DEC-1997
APPLICATION NUMBER: PCT/JP97/04468
FILING DATE: 05-DEC-1997
APPLICATION NUMBER: DS-DEC-1997
APPLICATION NUMBER: DS-DEC-1997
APPLICATION NUMBER: DS-DEC-1997
APPLICATION NUMBER: 05-DEC-1997
APPLICATION NUMBER: 05-DEC-1997
APPLICATION NUMBER: 05-DEC-1997
APPLICATION NUMBER: 05-DEC-1997
APPLICATION NUMBER: DS-DEC-1996
ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ADDRESSEE: Fitzpatrick, Cella, Harper & Scinto STREET: 30 Rockefeller Plaza
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        MOLECULE TYPE: other nucleic acid, synthetic DNA
                                                                                                                                                           ; MOLECULE TYPE: other nucleic acid, synthetic DNA US-09-090-672B-105
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Match 0.3%; Score 16; DB 1; Local Similarity 100.0%; Pred. No. 77; les 16; Conservative 0; Mismatches
                                                                                                                                                                                                                                                    DB 1;
                                                                                                                                                                                                                                              Query Match
0.3%; Score 16; DB
Best Local Similarity 100.0%; Pred. No. 77;
Matches 16; Conservative 0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               US-09-090-672B-106/c
; Sequence 106, Application US/09090672B
; Patent No. 6828428
; GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   766.21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TELECOMMUNICATION INFORMATION:
TELEPHONE: (212) 218-2100
TELEPACK: (212) 218-2200
INFORMATION FOR SEG ID NO: 106:
SEQUENCE CHARACTERISTICS:
LENGTH: 17 base pairs
TYPE: nucleic acid
STRANDEDNESS: single
TOPOLOGY: linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         5050 AAAAAAAAAAAAAC 5065
                                                                                                                                                                                                                                                                                                                                                                 5024 TAAAAAAAAAAAA 5039
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               NAME: Perry, Lawrence S. REGISTRATION NUMBER: 31865
REFERENCE/DOCKET NUMBER: 74
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               16 AAAAAAAAAAAAA 1
                                                                                                                                                                                                                                                                                                                                                                                                                  17 TAAAAAAAAAAAA 2
INFORMATION FOR SEQ ID NO: SEQUENCE CHARACTERISTICS:
                                                            LENGTH: 17 base pairs
TYPE: nucleic acid
STRANDEDNESS: single
                                                                                                                                               linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CITY: New York
STATE: New Yor!
                                                                                      TYPE: nucleic
STRANDEDNESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           US-09-090-672B-106
                                                                                                                                            TOPOLOGY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        RESULT 78
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Db
                                                                                                                                                                                                                                                                                                                                                                       ò
                                                                                                                                                                                                                                                                                                                                                                                                                     ద
                                                                                                                   APPLICANT: Pavoc, Pam
APPLICANT: Pavoc, Pam
APPLICANT: McSwiggen, Jim
APPLICANT: Stinchcoub, Dan
APPLICANT: Stinchcoub, Dan
APPLICANT: Stinchcoub, Jame
TITLE OF INVENTION: Method and Reagent for Treatment of Diseases or Conditions Relate
TITLE OF INVENTION: Method and Reagent for Treatment of Diseases or Conditions Relate
TITLE OF INVENTION: Method and Reagent for Treatment of Diseases or Conditions Relate
TITLE OF INVENTION: Method and Reagent for Treatment of Diseases or Conditions Relate
TITLE OF INVENTION WUMBER: US 00/005, 974
PRIOR PAPLICATION NUMBER: US 60/005, 974
PRIOR PLILING DATE: 1995-01-08
PRIOR PLILING DATE: 1995-01-08
PRIOR PLILING DATE: 1995-01-08
PRIOR PLILING DATE: 1999-08-10
PRIOR FILING DATE: 1999-08-10
WUMBER OF SEC ID NOS: 8231
SOFTWARE: PAPLICATION VESTSION 3.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      GENERAL INFORMATION:
GENERAL INFORMATION:
GENERAL INFORMATION:
GENERAL INFORMATION:
GENERAL INFORMATION:
GENERAL INFORMATION:
APPLICANT:
Shigemasa, Takei, Masami
TITLE OF INVENTION:
ISA Nephropathy-Related Genes
TITLE OF INVENTION:
IN CORRESPONDENCE 111
CORRESPONDENCE ADDRESS:
ADDRESSEE: Fitzpatrick Cella, Harper & Scinto
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ..
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Query Match 0.3%; Score 16; DB 1; Length 17; Best Local Similarity 100.0%; Pred. No. 77; Matches 16; Conservative 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CITY: New York
STATE: New York
ZIP: 10112-30 NOCALIELIEL FIREA
ZIP: 10112-30 NOCALIELIEL FIREA
ZIP: 10112-30 NOCALIELIEL FORM:
MEDIUM TYPE: Diskette, 3.50 inch, 1.44 Mb storage
COMPUTER: Compad PC
OPERATING SYSTEM: Windows 95
SOFTWARE: WordPerfect 8.0
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/090,672B
FILING DATE: 04-JUNE-1998
CLASSIFICATION NATA:
APPLICATION NUMBER: PCT/JP97/04468
FILING DATE: 05-DEC-1997
APPLICATION NUMBER: JP-8-325763
FILING DATE: 05-DEC-1996
ATTORNEY/AGENT INFORMATION:
AND ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ADDRESSER: Fitzpatrick, Cella, Harper & Scinto STREET: 30 Rockefeller Plaza
                                                                     GENERAL INFORMATION:
APPLICANT: Ribozyme Pharmaceuticals, Inc
              Sequence 1075, Application US/09685664B
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Sequence 105, Application US/09090672B Patent No. 6828428
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     NAME: Perry, Lawrence S.
REGISTRATION NUMBER: 31865
REPERENCE/DOCKET NUMBER: 766.21
TELECOMUNICATION INFORMATION:
TELEPHONE: (212) 218-2100
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             5025 AAAAAAAAAAAAA 5040
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  (212) 218-2100
(212) 218-2200
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    16 AAAAAAAAAAAAAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TYPE: RNA
ORGANISM: Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 RESULT 77
US-09-090-672B-105/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               US-09-685-664B-1075
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 SEQ ID NO 1075
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              LENGTH: 17
```

ò ద

```
3'-end is labeled with biotin and 5'-end phosphorylated
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Sequence 6. Application US/09439616

Patent No. 630612

GENERAL INVORMATION:

APPLICANT: Schwarz, Margaret A.

APPLICANT: Schwarz, Margaret A.

APPLICANT: Gebb Sarah A.

TITLE OF INVENTENCY: Exhaps on Vascularization

CURRENT FILIG DATE: 1999-11-12

BARLIER PEPRENCE: 1999-11-12

BARLIER PPLICATION NUMBER: 60/108,435

BARLIER FILING DATE: 1998-11-13

NUMBER OF SEQ ID NOS: 12

SOFTWARE: Patentin Ver. 2.0

LENGTH: 21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ; OTHER INFORMATION: Description of Artificial Sequence: primer US-09-439-616-6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                0.3%; Score 16; DB 1; Length 20;
100.0%; Pred. No. 93;
ive 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Length 21;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       0; Indels
                     MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/065,058
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Query Match
0.3%; Score 16; DB 1;
Best Local Similarity 100.0%; Pred. No. 98;
Matches 16; Conservative 0; Mismatches
                                                                                                                                                            PILING DATE:
CLASSIPICATION: 435
PRIOR APPLICATION DATE:
APPLICATION NUMBER: WO 97JP3232
FILING DATE: 12-SEP-1997
CLASSIPICATION: 435
PRIOR APPLICATION OF 435
PROBLECATION OF 435
PRIOR APPLICATION: 435
PRIOR APPLICATION: 435
PRIOR APPLICATION NUMBER: JP 96243720
FILING DATE: 13-SEP-1996
CLASSIPICATION: 435
ATTORNEY/AGENT INFORMATION:
NAME: KILYK JR., JOHN
REGISTRATION NUMBER: 7282
TELECOMMUNICATION INFORMATION:
TELEPHONE: (312) 616-5700
TELEFAX: (32) 616-5700
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          2988 GAGCCATCTTCATGAT 3003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TYPE: DNA
ORGANISM: Artificial Sequence
PEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                5 GGATCCCCCGGGCTGC 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              . Query Match
Best Local Similarity 100.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    single
COMPUTER READABLE FORM:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TYPE: nucleic acid
STRANDEDNESS: sing
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               MOLECULE TYPE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   US-09-065-058-1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   US-09-439-616-6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ð
                  S-09-090-672B-107/C
Sequence 107, Application US/09090672B
Patent No. 6828428
GENERAL INFORMATION:
APPLICANT: Ishiwata, Tetsuyoshi; Sakurada, Mikiko; Nishimura,
APPLICANT: Shigemasa; Takei, Masami
TITLE OF INVENTION: 19A Nephropathy-Related Genes
NUMBER OF SEQUENCES: 111
CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Sequence 1, Application US/09065058

Sequence 1, Application US/09065058

Patent No. 6255056

GENERAL INFORMATION:
APPLICANT: ABE, SHIZHOKA

APPLICANT: SATO, YOSHIHIRO
ITILE OF INVENTION: SOLID PHASES FOR DETECTION OF TARGET NUCLEIC
ITILE OF INVENTION: ACIDS, PREPARATION METHODS OF
ITILE OF INVENTION: DETECTING TARGET NUCLEIC ACIDS
NUMBER OF SEQUENCES: 16

CORRESPONDENCE ADDRESS:
ADDRESSEE: LEYDIG, VOIT & MAYER, LID.

ADDRESSEE: LEYDIG, VOIT & MAYER, LID.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Query Match 0.3%; Score 16; DB 1; Length 17; Best Local Similarity 100.0%; Pred. No. 77; Matches 16; Conservative 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                             ADDRESSEE: Fitzpatrick, Cella, Harper & Scinto
STREET: 30 Rockefeller Plaza
CITY: New York
STATE: New York
ZIP: 10112-3801
COMPUTER READABLE FORM: MEDIUM TYPE: Diskette, 3.50 inch, 1.44 Mb storage
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           MOLECULE TYPE: other nucleic acid, synthetic DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ADDRESSEE: LEYDIG, VOIT & MAYER, LTD.
STREET: TWO PRUDENTIAL PLAZA, SUITE 4900
CITY: CHICAGO
STATE: ILLINOIS
COUNTRY: USA
                                                                                                                                                                                                                                                                                                                                                                                                                                                          COMPUTER: Compad PC
OPERATING SYSTEM: Windows 95
SOFTWARE: WordPerfect 8.0
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/090,672B
FILING DATE: 04-JUNE-1998
CLASSIFICATION 514
PRIOR APPLICATION DATA:
APPLICATION NUMBER: PCT/JP97/04468
FILING DATE: 05-DEC-1997
APPLICATION NUMBER: JP-8-325763
FILING DATE: 05-DEC-1997
ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        NAME: Perry, Lawrence S.
REGISTRATION NUMBER: 31865
REFERENCE/DOCKET NUMBER: 766.21
TELECOMOUNICATION INFORMATION:
TELEPHONE: (212) 218-2100
TELEFAX: (312) 218-2200
INFORMATION FOR SEQ ID NO: 107:
SEQUENCE CHARACTERISTICS:
LENGTH: 17 base pairs
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             5050 AAAAAAAAAAAAAAC 5065
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             16 AAAAAAAAAAAAA 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TYPE: nucleic acid
STRANDEDNESS: single
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 US-09-090-672B-107
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TOPOLOGY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           음
```

Gaps

ö

Gape

۲,

```
US-08-474-177-8/C
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              COUNTRY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   13
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Matches
                                                                                                                                                                                                          g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   엄
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Sequence 21, Application US/08582539;
Sequence 21, Application US/08582539;
Patent No. 5733732;
GENERAL INFORMATION:
APPLICANT: Campbell, Kevin P., et al.
TITLE OF INVENTION: COMPOSITIONS AND METHODS FOR DETECTING PRIMARY;
TITLE OF INVENTION: ADHALINOPATHY
NUMBER OF SEQUENCES: 32
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ö
                                                                                       sequence 12, Application US/09439616

Sequence 12, Application US/09439616

Batent No. 6306612

GENERAL INFORMATION:

APPLICANT: Schwarz, Margaret A.

APPLICANT: Schwarz, Margaret A.

APPLICANT: Schwarz, Margaret A.

APPLICANT: Gebb, Sarah A.

TITLE OF INVENITON: Methods of Facilitating Vascular Growth
FILE REFERENCE: EMAP2 and Vascularization

CURRENT APPLICATION NUMBER: US/09/439,616

CURRENT PILING DATE: 1999-11-12

EARLIER FILING DATE: 1999-11-13

NUMBER OF SEQ ID NOS: 12

SOFTWARRE: Patentin Ver. 2.0

SEQ ID NO 12

LENGTH: 21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 , OTHER INFORMATION: Description of Artificial Sequence: primer US-09-439-616-12
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Length 21;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Query Match 0.3%; Score 16; DB 1; Best Local Similarity 100.0%; Pred. No. 98; Matches 16; Conservative 0; Mismatches (
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      35,505
ER: UIRF-9501
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ATTORNEY AGENT INFORMATION:
NAME: Farrell, Kevin M.
REGISTRATION NUMBER: 35,505
REFRENCE/DOCKET NUMBER: UIRE
TELECOMMUNICATION INFORMATION:
TELEPHONE: 207-363-0558
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      2988 GAGCCATCTTCATGAT 3003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           INFORMATION FOR SEQ ID NO: 21:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   5 GAGCCATCTTCATGAT 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ORGANISM: Artificial Sequence
5 GAGCCATCTTCATGAT 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             SEQUENCE CHARACTERISTICS:
LENGTH: 19 base pairs
TYPE: nucleic acid
STRANDEDNESS: double
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     NUMBER OF SEQUENCES: 32
CORRESPONDENCE ADDRESS:
ADDRESSEE: Kevin M. Fa
STREET: P.O. BOX 999
CITY: York Harbor
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       207-363-0528
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CLASSIFICATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       USA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            03911
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  RESULT 83
US-08-582-539-21/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Σ
                                                                                       US-09-439-616-12
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       COUNTRY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 STATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                         TYPE: DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ઠે
  셤
```

```
US-U9-422-9/0-4125//C
US-U9-422-9/0-4125//C
Sequence 4157, Application US/09422978
Patent No. 6537751
GENERAL INPORMATION:
APPLICANT: Chen, Daniel
APPLICANT: Chumakov, Ilya
APPLICANT: Glumakov, Ilya
CURRENT APPLICATION UNMER: US/09/422,978
CURRENT APPLICATION NUMBER: US/09/22,978
CURRENT FILING DATE: 1999-10-20
EARLIER FILING DATE: 1999-10-20
EARLIER FILING DATE: 1998-11-23
EARLIER FILING DATE: 1998-11-23
EARLIER APPLICATION NUMBER: US 60/109,732
EARLIER APPLICATION NUMBER: US 60/109,732
EARLIER APPLICATION UNMER: US 60/109,732
EARLIER FILING DATE: 1998-11-23
NUMBER OF SEQ ID NOS: 11796
SEQ ID NOS: 11796
SEQ ID NO 4157
                                                                                                                                       ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ; LOCATION: 1..19 ...; j. OTHER INFORMATION: upstream amplification primer 99-13598 for SEQ 223, US-09-422-978-4157
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Gaps
                                                                                                                                            Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ö
                                                                                                                                            ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Length 19;
                                                                                             Length 19;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sequence 8, Application US/08474177
Patent No. 5624819
GENERAL INFORMATION
GENERAL INFORMATION:
APPLICANT: Cannon-Albright, Lisa A.
APPLICANT: Kamb, Alexander
TITLE OF INVENTIONS: GERMLINE MUTATIONS IN THE MTS GENE
NUMBER OF SEQUENCES: 36
CORRESPONDENCE ADDRESS:
ADDRESSEE: ADDRESS:
ADDRESSEE: Venable, Baetjer, Howard & Civiletti, LLP
STREET: 1201 New York Avenue, Suite 1000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.30
                                                                                               DB 1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                DB 1;
                                                                                          Query Match 0.3%; Score 15.8; D
Best Local Similarity 89.5%; Pred. No. 93;
Matches 17; Conservative 0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             0.3%; Score 15.8; I
89.5%; Pred. No. 93;
tive 0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             3884 CTGGAGCACAGTCTGTTCT 3902
                                                                                                                                                                                          4171 GCAGCTGTTCAGGGCAACA 4189
                                                                                                                                                                                                                                      19 GCAGGTGTTCAGGGCAGCA 1
; TOPOLOGY: linear
; MOLECULE TYPE: DNA (genomic)
US-08-582-539-21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CTGGAGCTGAGTCTGTTCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               17; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TYPE: DNA
ORGANISM: Homo Sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     STREET: 120.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Best Local Similarity
                                                                                                                                                                                                                                                                                                                                      US-09-422-978-4157/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          20005
```

```
Gapa
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 DB 1; Length 20;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               IndelB
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Sequence 8, Application US/08480810
Patent No. 5801216
GENERAL INFORMATION:
APPLICANT Kamb, Alexander
TITLE OF INVENTION: WTS1 GENE
NUMBER OF SEQUENCES: 36
CORRESPENDENCE ADDRESS:
ADDRESSEE: Venable, Baetjer, Howard & Civiletti, LLP
STREET: 1201 New York Avenue, Suite 1000
CITY: Waghington
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.30
APPLICATION NATH.
FILING DATE: 07-JUN-1995
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              24884-109348-C
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Pred. No. 98;
0; Mismatches
                   CLASSIFICATION: 435
PRIOR APPLICATION DATA:
APPLICATION NUMBER: PCT/US95/03316
FILING DATE: 17-MAR-1995
PRIOR APPLICATION DATA:
APPLICATION DATA:
APPLICATION DATA:
PRIOR APPLICATION DATA:
APPLICATION DATA:
APPLICATION NUMBER: US 08/215,087
FILING DATE: 18-MAR-1994
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/215,086
FILING DATE: 18-MAR-1994
PRIOR APPLICATION NUMBER: US 08/215,369
FILING DATE: 14-APR-1994
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/227,369
FILING DATE: 14-APR-1994
PRIOR APPLICATION DATA: US 08/214,582
FILING DATE: 18-MAR-1994
PRIOR APPLICATION DATA: US 08/214,582
FILING DATE: 18-MAR-1994
APPLICATION NUMBER: US 08/214,582
FILING DATE: 18-MAR-1994
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Score 15.8;
Pred. No. 9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           4079 GGTTCCAGTTGCCAATTTC 4097
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          NAME: Ihnen, Jeffrey L.
REGISTRATION NUMBER: 28,957
REFERENCE/DOCKET NUMBER: 24
TELECOMMUNICATION INFORMATION:
TELEPHONE: 202-962-4810
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       20 GCTTCCAGTTTCCAATTTC 2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TOPOLOGY: linear MOLECULE TYPE: DNA (genomic)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Query Match
Best Local Similarity 89.5%;
Matches 17; Conservative
    07-JUN-1995
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CRGANISM: Homo sapiens US-08-487-033-8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TELEFAX: 202-962-8300
INFORMATION FOR SEQ ID NO:
SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 LENGTH: 20 base pairs
TYPE: nucleic acid
STRANDEDNESS: single
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 FILING DATE: 07-JUN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ANTI-SENSE: NO ORIGINAL SOURCE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ZIP: 20005
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   JS-08-480-810-8/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CITY: Was
STATE: DO
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Sequence 8, Application US/08487033
; Sequence 8, Application US/08487033
; Patent No. 5739027
; GENERAL INFORMATION:
    APPLICANT: Kamb, Alexander
    TITLE OF INVENTION:
    ADDRESSEE: ADDRESS:
    ADDRESSEE: Venable, Baetjer, Howard & Civiletti, LLP
    STREET: 1201 New York Avenue, Suite 1000
    CITY: Washington
    STATE: D
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               DB 1; Length 20;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.30
            PELLING DATE:

PILING DATE:

CLASSIPICATION: 435

CLASSIPICATION: 435

PRIOR APPLICATION NUMBER: 907-JUN-1995

PRIOR APPLICATION NUMBER: PCT/US95/03537

PRIOR APPLICATION DATA:

PILING DATE: 17-MAR-1995

PRIOR APPLICATION DATA:

APPLICATION NUMBER: US 08/215,087

FILING DATE: 18-MAR-1994

PRIOR APPLICATION DATA:

APPLICATION NUMBER: US 08/215,086

FILING DATE: 18-MAR-1994

PRIOR APPLICATION DATA:

APPLICATION NUMBER: US 08/217,369

FILING DATE: 14-APR-1994

PRIOR APPLICATION DATA:

APPLICATION NUMBER: US 08/214,582

FILING DATE: 14-APR-1994

PRIOR APPLICATION NUMBER: 28,957

REGISTRATION NUMBER: 28,957

REGISTRATION NUMBER: 28,957

REGISTRATION NUMBER: 28,957

REGISTRATION NUMBER: 28,957

RELERAN: 202-962-4810

INPORMATION FOR SEQ ID NO: 8:

SEGUENCE CHARACTERISTICS:

LEMERA: 202-962-4810

INPORMATION FOR SEQ ID NO: 8:

SEGUENCE CHARACTERISTICS:

LEMERA: 20 Dase pairs
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             0.3%; Score 15.8;
89.5%; Pred. No. 98
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    APPLICATION NUMBER: US/08/487,033
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       4079 GGTTCCAGTTGCCAATTTC 4097
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         MOLECULE TYPE: DNA (genomic)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ORGANISM: Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Query Match 0.3
Best Local Similarity 89.5
Matches 17; Conservative
CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TYPE: nucleic acid
STRANDEDNESS: single
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ZIP: 20005
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy of
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     USA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               HYPOTHETICAL:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               US-08-487-033-8/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              US-08-474-177-8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  COUNTRY:
```

ô

```
GERMLINE MUTATIONS IN THE MTS GENE AND METHOD FOR DETECTING PREDISPOSITION TO CANCER AT THE MTS GENE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Sequence 8, Application US/08848251
; Sequence 8, Application US/08848251
; Sequence 8, Application US/08848251
; GENERAL INFORMATION:
    APPLICANT: Skolnick, Mark H.
    APPLICANT: Cannon-Albright, Lisa A.
    APPLICANT: Cannon-Albright, Lisa A.
    APPLICANT: Ramb, Alexander
    TITLE OF INVENTION: GERMINE MUTATIONS IN THE WIS GENE AND TITLE OF INVENTION: GERME
    TOTES OF ORDERESS: 36
    CORRESPONDENCE ADDRESSE:
    ADDRESSEE: Venable, Baetjer, Howard & Civiletti, LLP
    STREET: 1201 New York Avenue, Suite 1000
    CITY: Mashington
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     DB 1; Length 20;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           COUNTRY: USA
ZIP: 20005
ZIP: 20005
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
OPERATING SYSTEM: PC-DOS/MS-DOS
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/848,251
FILLING BATE:
CLASSIFICATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ; Score 15.8; DE; Pred. No. 98; 0; Mismatches
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US to be assigned
FILING DATE: 07-040N-1995
PRIOR APPLICATION DATA:
APPLICATION NUMBER: PCT/US95/03316
FILING DATE: 17-MAR-1995
ATTORNEY/AGENT INFORMATION:
NAME: Inhen, Jeffrey L.
REGISTRATION NUMBER: 28,957
REGISTRATION NUMBER: 28,957
TELECOMMUNICATION INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      APPLICATION NUMBER: US 08/474,083
FILING DATE: 07-JUN-1995
APPLICATION NUMBER: PCT/US95/03537
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  FILING DATE: 17-MAR.1995
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/251,938
FILING DATE: 01-JUN-1994
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/215,087
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CLASSIFICATION DATA:
PRIOR APPLICATION NIMBER: US 08/474,083
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         4079 GGTTCCAGTTGCCAATTTC 4097
                                                                                                                                                                                                                                                            1NFORMATION FOR SEQ ID NO: 8: SEQUENCE CHARACTERISTICS: LENGTH: 20 base pairs TYPE: mucleic acid STRANDEDNESS: single TOPOLOGY
                                                                                                                                                                                                                                                                                                                                                                                                                                              TOPOLOGY: linear MOLECULE TYPE: DNA (genomic)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Query Match 0.3%;
Best Local Similarity 89.5%;
Matches 17; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               17-MAR-1995
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              HYPOTHETICAL: NO
ANTI-SENSE: NO
ORIGINAL SOURCE:
ORGANISM: Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          US-08-848-251-8/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               US-08-508-735-8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         STATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               DB 1; Length 20;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        RESULT 88
US-08-508-735-8/c
Sequence 8, Application US/08508735
Patent No. 5843756
GENERAL INFORMATION:
APPLICANT: Stone, Steven
APPLICANT: Jiang, Ping
APPLICANT: Kamb, Alexander
TITLE OF INVENTION:
NUMBER OF SEQUENCES: 47
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ADDRESSEE: Venable, Baetjer, Howard & Civiletti, STREET: 1201 New York Avenue, Suite 1000 CITY: Washington STATE: DC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       COUNTRY: USA
ZIP: 2005
ZIP: 2005
ZOMPUTER REDABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/508,735
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Score 15.8; Pred. No. 98;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    24884-109348
                 PRIOR APPLICATION DATA:
APPLICATION NUMBER: PCT/US95/03316
FILING DATE: 17-MAR.1995
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/251,938
FILING DATE: 01-JUN 1994
PRIOR APPLICATION DATA:
FILING DATE: 10-JUN 1994
PRIOR APPLICATION NUMBER: US 08/215,087
FILING DATE: 18-MAR.1994
PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                    PRICATION NUMBER: US 08/215,086
FILING DATE: 18-MAR-1994
PRIOR APPLICATION DATE:
APPLICATION NUMBER: US 08/227,369
FILING DATE: 14-APR-1994
PRIOR APPLICATION NUMBER: US 08/214,582
APPLICATION NUMBER: US 08/214,582
FILING DATE: 18-MAR-1994
ATTORNEY AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  4079 GGTTCCAGTTGCCAATTTC 4097
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               NAME: Ihnen, Jeffrey L.
REGISTRATION NUMBER: 28,957
REFERENCE/POCKET NUMBER: 2488
TELECOMMUNICATION INFORMATION:
TELEPHONE: 202-962-4810
TELEFAX: 202-962-8300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                20 GCTTCCAGTTTCCAATTTC 2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TOPOLOGY: linear
MOLECULE TYPE: DNA (genomic)
HYPOTHETICAL: NO
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Ouery Match 0.3%;
Best Local Similarity 89.5%;
Matches 17; Conservative (
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     INFORMATION FOR SEQ ID NO: SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 LENGTH: 20 base pairs
TYPE: nucleic acid
STRANDEDNESS: single
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                FILING DATE:
CLASSIFICATION: 435
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ORIGINAL SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ORGANISM:
US-08-480-810-8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   g
```

Gaps

```
0.3%; Score 15.8; DB 1; Length 20;
89.5%; Pred. No. 98;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       IndelB
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            S-09-120-130-8/c
Sequence 8, Application US/09120130
Patent No. 6037462
GENERAL INFORMATION:
APPLICANT: Kamb, Alexander
TITLE OF INVENTION: WTS1 GENE
NUMBER OF SEQUENCES: 36
CORRESPONDENCE ADDRESS:
ADDRESSE: Venable, Baetjer, Howard & Civiletti, LLP
STREET: 1201 New York Avenue, Suite 1000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CURRENT APPLICATION NUMBER: US/09/120,130
                                                                                                                                                                                                                          REFERENCE/DOCKET NUMBER: 24884-109348-B
TELECOMMUNICATION INFORMATION:
TELEPHONE: 202-962-4810
TELEPHONE: 202-962-8300
INFORMATION FOR SEQ ID NO: 8:
SEQUENCE CHRACTERISTICS:
LENGTH: 20 base pairs
TYPE: nucleic acid
STRANDEDNESS: single
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     0; Mismatches
                           FILING DATE: 18-MAR-1994
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/227,369
FILING DATE: 14-APR-1994
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/214,582
FILING DATE: 18-MAR-1994
ATTORNEY/AGGNT INCRNATION:
NAME: Ihnen, Jeffrey L.
REGISTRATION NUMBER: 28,957
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/251,938
FILING DATE: 01-JUN-1994
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/215,087
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           APPLICATION NUMBER: US 08/215,087 FILING DATE: 18-MAR-1994 PRIOR APPLICATION DATA: APPLICATION NUMBER: US 08/215,086 FILING DATE: 18-MAR-1994
            US 08/215,086
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CLASSIFICATION:
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 08/480,810
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             4079 GGTTCCAGTTGCCAATTTC 4097
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 COMPUTER: Ploppy disk COMPUTER: IBM PC compatible OPERATING SYSTEM: PC-DOS/Menate Person.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ORGANISM: Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Best Local Similarity 89.5
Matches 17; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ZIP: 20005
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy
                                                                                                                                                                                                                                                                                                                                                                                                              TOPOLOGY: linear MOLECULE TYPE: DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               USA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ANTI-SENSE: NO
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ORIGINAL SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                      HYPOTHETICAL:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CITY: Wal
STATE: DO
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     US-08-486-047-8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         DB 1; Length 20;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             COMPUTER READELE FORM:

MEDIUW TYPE: Floppy disk

COMPUTER: IBM PC compatible
OPERATIOS SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PAtentin Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/486,047
FILING DATE: 07-JUN-1995
CLASSIFICATION NUMBER: PCT/US95/03316
PRIOR APPLICATION DATA:
APPLICATION NUMBER: PCT/US95/03316
FILING DATE: 01-JUN-1995
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/251,938
FILING DATE: 01-JUN-1994
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/251,938
FILING DATE: US 08/251,938
PILING DATE: 18-MAR-1994
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/215,086
FILING DATE: 18-MAR-1994
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/227,369
FILING DATE: 14-APR-1994
PRIOR APPLICATION NUMBER: US 08/214,582
FILING DATE: 18-MAR-1994
ATTORNEY/AGENT INFORMATION:
NAME: Inhen, Jeffrey L.
REGISTRATION NUMBER: 24884-109348-G
TELECOMMUNICATION INFORMATION:
TELEFRAM: 202-962-8410
TELEFRAM: 202-962-8410
TELEFRAM: 202-962-8410
TELEFRAM: 202-962-8410
TELEFRAM: 202-962-810
SEQUENCE CHARACTERISTICS:
LENGTH: 20 base pairs
TYPE: nucleic acid
STRANDEDNESS: single
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Query Match 0.1%; Score 15.8; I
Best Local Similarity 89.5%; Pred. No. 98;
Matches 17; Conservative 0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      FILING DATE: 18-MAR-1994
PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     4079 GGTTCCAGTTGCCAATTTC 4097
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          20 ścirccagiriccaarirc 2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CRGANISM: Homo sapiens US-08-848-251-8
                                                                                                                                                                                                                                                                                                                                                                                                                                                        linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ပ္
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      MOLECULE TYPE:
HYPOTHETICAL: N
```

셤

```
bond, Julian F.;

Lond, Julian F.;

Lond, Julian F.;

APPLICANT: Kuo, Mei-Chang;

APPLICANT: Yeung, Siu-mei H.;

APPLICANT: Bxley, Mark A.;

APPLICANT: Bxley, Mark A.;

APPLICANT: Powers, Steven P.;

TITLE OF INVENTION: Allergenic Proteins And Peptides From TITLE OF INVENTION: Allergenic Proteins And Peptides From TITLE OF INVENTION: Allergenic Proteins And Peptides From TITLE OF INVENTION: Allergenic Political Correspondence Addresses: 18multogic Pharmaceutical Colfice STREET: 610 Lincoln St.;

CITY: Waltham STATE: Ma.

COUNTRY: 110.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    DB 1; Length 20;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC Compatible
COMPUTER: IBM PC Compatible
OPENATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.25
CURRENT APPLICATION DATE:
FLIING DATE: US/08/467,023
FILING DATE: Unne 6, 1995
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       0.3%; Score 15.8; D
89.5%; Pred. No. 98;
tive 0; Mismatches
PRIOR APPLICATION DATA:

APPLICATION NUMBER: US 08/227,369
FILING DATE: 14-APR-1994
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/214,582
FILING DATE: 18-MAR-1994
ATTONNEY/AGENT INFORMATION:
NAME: Ihnen, Jeffrey L.
REGISTAATION NUMBER: 28/957
REGISTAATION NUMBER: 28/957
REJERANCE/DOCKET NUMBER: 24/810
TELEPAN: 202-962-4810
TELEPAN: 202-962-4810
TELEPAN: 202-962-8300
INFORMATION FOR SEQ ID NO: SEQUENCE CHARACTERISTICS:
LENGTH: 20 base pairs
TYPE: nucleic acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          FILING DATE: June 6, 1995
CIASSIPTCATION: 424
CIASSIPTCATION A14
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 08/350,225
FILING DATE: December 6, 1994
ATTORNEY/AGENT INFORMATION:
NAME: Jane E. Remillard
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     4079 GGTTCCAGTTGCCAATTTC 4097
                                                                                                                                                                                                                                                                                                                                                                                                                                              MOLECULE TYPE: DNA (genomic) HYPOTHETICAL: NO
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ORGANISM: Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Query Match 0.3
Best Local Similarity 89.5
Matches 17; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ZIP: 02154
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy
                                                                                                                                                                                                                                                                                                                                                                                                                           linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ANTI-SENSE: NO
ORIGINAL SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                STRANDEDNESS:
TOPOLOGY: lir
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               US-08-467-023-167/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  US-09-115-252-8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      US-09-115-252-8/C
; Sequence 8, Application US/09115252
; Sequence 8, Application US/09115252
; Batent No. 6060301
; Patent No. 6060301
; TITLE OF INVENTION: MTS1 GENE
; NUMBER OF SEQUENCES: 36
; CORRESPONDENCE ADDRESS:
; STREET: 1201 New York Avenue, Suite 1000
; CITY: Washington
; STATE: DC
; COUNTRY: USA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       DB 1; Length 20;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ZIP: 2005
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFWARE: Patentin Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/115,252
FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     0.3%; Score 15.8; D.
89.5%; Pred. No. 98;
tive 0; Mismatches
            PRIOR APPLICATION DATA:

APPLICATION NUMBER: US 08/227,369
FILING DATE: 14-APR-1994
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/214,582
FILING DATE: 18-MAR-1994
ATTORNEY/AGENT INFORMATION:
NAME: Then, Jeffrey L.
REGISTRATION NUMBER: 28,957
REFERENCE DOCKET NUMBER: 28,957
REFERENCE TOOKET NUMBER: 28,957
TELECOMMUNICATION INFORMATION:
TELEPHONE: 202-962-8300
INFORMATION FOR SEQ 1D NO: 8: SEQUENCE CHARACTERISTICS:
SEQUENCE CHARACTERISTICS:
LENGTH: 20 base pairs
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       PRIOR APPLICATION DATA:
APPLICATION NUMBER: US/08/480,810
FILING DATE: 07-UN-1995
APPLICATION NUMBER: PCT/US95/03316
FILING DATE: 17-MAR-1995
PRIOR APPLICATION DATA:
APPLICATION DATA: 08/251,938
FILING DATE: 01-UN-1994
PRIOR APPLICATION NUMBER: US 08/251,938
FILING DATE: 18-MAR-1994
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/215,087
FILING DATE: 18-MAR-1994
FILING DATE: 18-MAR-1994
FILING DATE: 18-MAR-1994
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   4079 GGTTCCAGTTGCCAATTTC 4097
                                                                                                                                                                                                                                                                                                                                                                                                                                                          MOLECULE TYPE: DNA (genomic) HYPOTHETICAL: NO
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ORIGINAL SOURCE:
ORGANISM: Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Best Local Similarity 89.5
Matches 17; Conservative
                                                                                                                                                                                                                                                                                                                                                                                         TYPE: nucleic acid
STRANDEDNESS: single
TOPOLOGY: linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CLASSIFICATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  HYPOTHETICAL: N
ANTI-SENSE: NO
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              US-09-120-130-8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Query Match
```

Gарв

ô

```
DB 1; Length 20;
                                                                                                                                                                                                                                                                                                                  2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            GENERAL INFORMATION:
APPLICANT: Kamb, Alexander
TITLE OF INVENTION: MTS2 GENE
NUMBER OF SEQUENCES: 36
CORRESPONDENCE ADDRESS:
ADDRESSEE: Venable, Baetjer, Howard & Civiletti, LLP
STREET: 1201 New York Avenue, Suite 1000
CITY: Mashington
STATE: DC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
COMPATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/120,128
                                                                                                                                                                                                                                                                        Score 15.8; I. Pred. No. 98; 0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  NAME: Ihnen, Jeffrey L.
REGISTRATION NUMBER: 28,957
REFERENCE/DOCKET NUMBER: 24884-109348-B
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        FILING DATE:

FILING APPLICATION:

PRIOR APPLICATION DATA:

APPLICATION NUMBER: US/08/486,047

FILING DATE: 07-JUN-1995

APPLICATION NUMBER: PCT/US95/03316

FILING DATE: 17 MAR-1995

APPLICATION NUMBER: US 08/251,938

FILING DATE: 01-JUN-1994

PRIOR APPLICATION DATA:

APPLICATION NUMBER: US 08/215,087

FILING DATE: 18-MAR-1994

PRIOR APPLICATION NUMBER: US 08/215,086

FILING DATE: 18-MAR-1994

PRIOR DATE: 14-APR-1994

PRIOR DATE: 14-APR-1994

PRIOR DATE: 14-APR-1994

PRIOR DATE: 18-MAR-1994

PRIOR DATE: 18-MAR-1994
                                                                                                                                                                                                                                                                                                                                                               4079 GGTTCCAGTTGCCAATTTC 4097
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Sequence 8, Application US/09120128
Patent No. 6140473
                                                                                                                                                                                                                                                                                                                                                                                                       20 GCTTCCAGTTTCCAATTTC 2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TELECOMMUNICATION INFORMATION:
TELEPHONE: 202-962-4810
                                                                                        linear
B: DNA (genomic)
                                                                                                                                                                                                                                                                      Query Match 0.3%;
Best Local Similarity 89.5%;
Matches 17; Conservative
                                                                                                                                                                                                    ; ORGANISM: Homo sapiens
US-08-986-515-8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     INFORMATION FOR SEQ ID NO:
  SEQUENCE CHARACTERISTICS
                            20 base pairs
                                            nucleic acid
EDNESS: single
                                                                                                                                                        ANTI-SENSE: NO
ORIGINAL SOURCE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        USA
                                                               STRANDEDNESS:
                                                                                        TOPOLOGY: lin
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               FILING DATE:
                                                                                                                                HYPOTHETICAL:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ZIP: 20005
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  JS-09-120-128-8/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        COUNTRY:
                         LENGTH:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             RESULT 95
                                                                                                                                                                                                                                                                                                                                                               ð
                                                                                                                                                                                                                                                                                                                                                               Gaps
                                                                                                                                                                                                                                                                                                                                                               ;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Sequence 8, Application US/08986515
| Patent No. 6090578
| GENERAL INFORMATION:
| APPLICANT: Kamb, Alexander
| TITLE OF INVENTION: MTS1 GENE
| NUMBER OF SEQUENCES: 36
| CORRESPONDENCE ADDRESS:
| ADDRESSEE: Venable, Baetjer, Howard & Civiletti, LLP
| CITY: Washington
| CITY: Washington
| STATE: DC | COUNTRY: USA
                                                                                                                                                                                                                                                                                                                  DB 1; Length 20
                                                                                                                                                                                                                                                                                                                                                               2; Indels
                  REPERENCE/DOCKET NUMBER: 025.6 USD2 (IMI-028CPD2)
TELECOMMINICATION INFORMATION:
   TELEPHONE: (617) 227-5941
INFORMATION FOR SEQ ID NO: 167:
SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   SOFTWARE: Patentin Release #1.0, Version #1.30
CUBRENT APPLICATION DATA:
PPLICATION NUMBER: US/08/986,515
FILING DATE:
                                                                                                                                                                                                                                                                                                                                                            0; Mismatches
                                                                                                                                                                                                                                                                                                              Query Match
0.3%; Score 15.8;
Best Local Similarity 89.5%; Pred. No. 98
Matches 17; Conservative 0; Mismatche
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   24884-109348
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      FILING DATE:
PRIOR APPLICATION DATA:
PRIOR APPLICATION DATA:
APPLICATION NUMBER:
FILING DATE: 01.-UN-1994
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/215,087
FILING DATE: 18-MAR-1994
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/215,086
FILING DATE: 18-MAR-1994
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/227,369
FILING DATE: 14-APR-1994
PRIOR APPLICATION NUMBER: US 08/227,369
FILING DATE: 18-MAR-1994
ATTORNEY/AGENT INFORMATION:
AMANCA TATORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CLASSIFICATION:
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/480,810
                                                                                                                                                                                                                                                                                                                                                                                                       57 GCAGCAGCTGAAGTGTAGT 75
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-
                                                                                                                                                                                                                                                                                                                                                                                                                                                 20 GCAGAAGCTGAAGTGCAGT 2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  NAME: Ihnen, Jeffrey L.
REGISTRATION NUMBER: 28,957
REFERENCE/DOCKET NUMBER: 24,
TELECOMMUNICATION:
TELEPHONE: 202-962-4810
REGISTRATION NUMBER: 38,872
                                                                                                                                                     LENGTH: 20 base pairs
TYPE: nucleic acid
STRANDEDNESS: single
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TELEFAX: 202-962-8300 INFORMATION FOR SEO ID NO:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ZIP: 20005
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy of
                                                                                                                                                                                                                         TOPOLOGY: linear MOLECULE TYPE: CDNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            JS-08-986-215-8/c
                                                                                                                                                                                                                                                                      US-08-467-023-167
                                                                                                                                                                                                                                                                                                                                                                                                         ઠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                 셤
```

Gaps

```
US-09-201-139-8/c
; Sequence 8, Application US/09201139
; Patent No. 6210499
; GENERAL INFORMATION:
    APPLICANT: Stone, Steven
    APPLICANT: Kamb, Alexander
; TITLE OF INVENTION: WTS GENE AND THERAPEUTIC USE THEREOF
; UNMBER OF SEQUENCES: 47
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Venable, Baetjer, Howard & Civiletti, LLP
STREET: 1201 New York Avenue, Suite 1000
; CITY: Washington
                                                                                                                                                                                                                                                                                                                                                                                          Score 15.8; DB 1; Length 20;
Pred. No. 98;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ZIP: 20005

COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/201,139
FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  REFERENCE/DOCKET NUMBER: 24884-109348
TELECOMMUNICATION INFORMATION:
TELEPHONE: 202-962-4848
TELEPHONE: 202-962-480300
INFORMATION FOR SEQ ID NO: 8:
SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           FILING DATE:
PRIOR APPLICATION DATA:
PRIOR APPLICATION NUMBER:
FILING DATE: 17-MAR-1995
ATTORNEY AGENT INPORMATION:
NAME: Ihnen, Jeffrey L.
REGISTRATION NUMBER:
REGISTRATION NUM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CLASSIFICATION:
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 08/508,735
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        4079 GGTTCCAGTTGCCAATTTC 4097
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       20 GCTICCAGITICCAATTTC 2
                                                                                                                      linear
linear
og: DNA (genomic)
                                                                                                                                                                                                                                                                                                                                                                                                 Query Match 0.3%;
Best Local Similarity 89.5%;
Matches 17; Conservative
                                                                                                                                                                                                                                     ANTI-SENSE: NO
ORIGINAL SOURCE:
ORGANISM: Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Homo sapiens
SEQUENCE CHARACTERISTICS:
LENGTH: 20 base pairs
                                  LENGTH: 20 base pairs
TYPE: nucleic acid
STRANDEDNESS: single
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1: 20 base pairs
nucleic acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    linear
                                                                                                                                TOPOLOGY: lin
MOLECULE TYPE:
HYPOTHETICAL: N
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ORIGINAL SOURCE:
CREANISM: HOW
US-09-201-139-8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 USA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             STRANDEDNESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               MOLECULE TYPE:
HYPOTHETICAL: N
                                                                                                                                                                                                                                                                                                                                      US-09-120-129-8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              COUNTRY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               STATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ;
0
                                                                                                                                                                                                                                                                                                                                                                                                               DB 1; Length 20;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       %3-05-120-129-8/c
; Sequence 8, Application US/09120129
; Patent No. 6180776
; Patent No. 6180776
; GENERAL INFORMATION:
APPLICANT: Kamb, Alexander
; TITLE OF INVENTION: MTS2 GENE
; NUMBER OF SEQUENCES: 36
; CORRESPONDENCE ADDRESS:
; ADDRESSE: Venable, Baetjer, Howard & Civiletti, LLP
; STREET: 1201 New York Avenue, Suite 1000
; CITY: Washington
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   COMPUTER READBLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/120,129
                                                                                                                                                                                                                                                                                                                                                                                                           Score 15.8; D
Pred. No. 98;
0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        24884-109348-B
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         PRIOR APPLICATION DATA

PRIOR DATE:

PILING DATE:

PLING DATE:

PRIOR APPLICATION DATA:

PRIOR APPLICATION DATA:

APPLICATION NUMBER: US 08/215,087

FILING DATE: 18-MAR-1994

PRIOR APPLICATION DATA:

APPLICATION NUMBER: US 08/215,086

FILING DATE: 18-MAR-1994

PRIOR APPLICATION DATA:

APPLICATION NUMBER: US 08/227,369

FILING DATE: 14-MAR-1994

PRIOR APPLICATION DATA:

APPLICATION NUMBER: US 08/214,582

FILING DATE: 18-MAR-1994

ATTORNEY/AGENT INFORMATION:

NAME: INhorn, Jeffrey L.

NAME: Inhorn, Jeffrey L.

REGISTATION NUMBER: 28,950
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   PCT/US95/03316
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/486,047
FILING DATE: 07-JUN-1995
APPLICATION NUMBER: PCT/US95/03316
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               4079 GGIICCAGIIGCCAAITIC 4097
                                      LENGTH: 20 base pairs
TYPE: nucleic acid
STRANDEDNESS: single
TOPOLOGY: linear
MOLECULE TYPE: DNA (genomic)
HYPOTHETICAL: NO
ANTI-SENSE: NO
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          20 GCTTCCAGTTTCCAATTTC 2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 REFERENCE/DOCKET NUMBER: 24
TELECOMMUNICATION INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                        Query Match 0.3%;
Best Local Similarity 89.5%;
Matches 17; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  FILING DATE: 17-MAR-1995
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       202-962-4810
202-962-8300
                                                                                                                                                                                                                                                                           ORIGINAL SOURCE:
ORGANISM: Homo sapiens
US-09-120-128-8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            INFORMATION FOR SEQ ID NO:
      SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          FILING DATE:
CLASSIFICATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      20005
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               COUNTRY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ð
```

```
4079 GGTTCCAGTTGCCAATTTC 4097
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      3672 TCTTACATACAGCCGAATT 3690
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                4489 CAGAAAGTAGGACCAAGTG 4507
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       19 rcrrccaracacccaarr 1
0.3%;
                                                                                                                                                                                   20 GCTTCCAGTTTCCAATTTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                20 CAGCAAGTAGGAGCAAGTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TYPE: DNA
ORGANISM: Artificial Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TYPE: DNA ORGANISM: Artificial Sequence
                                     Best Local Similarity 89.5
Matches 17; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Best Local Similarity 89.5
Matches 17; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    US-09-844-634-138/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 SEO ID NO 138
LENGTH: 20
      Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         셤
                                                                   ö
                                                                       Gape
                                                                   ö
   DB 1; Length 20;
                                                                   IndelB
                                                                                                                                                                                                                                                                                                                                                                                                            GENERAL INFORMATION:
APPLICANT: Kamb, Alexander
TITLE OF INVENTION: MTS2 GENE
NUMBER OF SEQUENCES: 36
CORRESPONDENCE ADDRESS:
ADDRESSEE: Venable, Baetjer, Howard & Civiletti, LLP
STREET: 1201 New York Avenue, Suite 1000
CITY: Washington
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    SOFTWARE: Patentin Release #1.0, Version #1.30 CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/120,131
0.3%; Score 15.8; D
89.5%; Pred. No. 98;
ive 0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           NAME: Ihnen, Jeffrey L.
REGISTRATION NUMBER: 28,957
REGISTPACHOCKET NUMBER: 24684-109348-B
TREECOMMUNICATION INFORMATION:
TELEPHONE: 202-962-4810
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       PRIOR APPLICATION:
PRIOR APPLICATION DATA:
PRIOR APPLICATION UNBER:
PFILING DATE:
OFFILING DATE:
OFFILING DATE:
PRIOR APPLICATION NUMBER:
PRIOR APPLICATION NUMBER:
PRIOR APPLICATION NUMBER:
PRIOR APPLICATION DATA:
APPLICATION NUMBER:
OFFILING DATE:
APPLICATION NUMBER:
PRIOR APPLICATION NUMBER:
PRIOR APPLICATION NUMBER:
ANAW:
ATTORNEY APPLICATION:
ANAW:
ANA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
                                                                                                                             4079 GGTTCCAGTTGCCAATTTC 4097
                                                                                                                                                                                                                                                                                                                                                  Sequence 8, Application US/09120131
Patent No. 6218146
                                                                                                                                                                         20 GCTTCCAGTTTCCAATTTC 2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          MOLECULE TYPE: DNA (genomic) HYPOTHETICAL: NO
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        INFORMATION FOR SEQ ID NO: 8: SEQUENCE CHARACTERISTICS: LENGTH: 20 base pairs
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Floppy disk
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ANTI-SENSE: NO
ORGINAL SOURCE:
CRGANISM: Homo sapiens
US-09-120-131-8
                                                                   Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          202-962-8300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TYPE: nucleic acid
STRANDEDNESS: single
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      COMPUTER READABLE FORM: MEDIUM TYPE: Floppy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  linear
                              Best Local Similarity
Matches 17; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         USA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      COUNTRY: U
                                                                                                                                                                                                                                                                                                                           US-09-120-131-8/c
   Query Match
```

```
Sequence 138, Application US/09844634
Fatent No. 6410324
GENERAL INFORMATION:
APPLICANT: C. Frank Bennett
APPLICANT: ANTISENSE MODULATION OF TUMOR NECROSIS FACTOR RECEPTOR 2 EXPRESSIC
FILE REFERENCE: TS-0216
CURRENT APPLICANTION NUMBER: US/09/844,634
CURRENT FILING DATE: 2001-04-27
NUMBER OF SEQ ID NOS: 174
                                                                                                                                                                                                                                                                                                                          ANTISENSE MODULATION OF PHOSPHORYLASE KINASE BETA EXPRESSION RTS-0129
                                          ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Gaps
                                          Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 DB 1; Length 20;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 DB 1; Length 20;
Score 15.8; DB 1; Length 20;
Pred. No. 98;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Indels
                                                                                                                                                    RESULT 99
US-09-662-250A-36/C
Sequence 36, Application US/09662250A
Patent No. 6368856
GENERAL INFORMATION:
APPLICANT: Brett P. Monia
APPLICANT: Jacqueline Wyatt
TITLE REFERENCE:
CURRENT PILING DATE: 2000-09-14
NUMBER OF SEQ ID NOS: 102
SEQ ID NO 36
LENGTH: 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ; OTHER INFORMATION: Antisense Oligonucleotide US-09-662-250A-36
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ; OTHER INFORMATION: Antisense Oligonucleotide US-09-844-634-138
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               0.3%; Score 15.8; I
89.5%; Pred. No. 98;
tive 0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            0.3%; Score 15.8; E
89.5%; Pred. No. 98;
tive 0; Mismatches
                                        0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    US-09-322-409-143
; Sequence 143, Application US/09322409
; Patent No. 6471957
; BEBERAL INFORMATION:
; APPLICANT: Sim, Gek-Kee
```

```
US-09-456-090A-4/C
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               SEQ ID NO 4
LENGTH: 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        19
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     APPLICANT: Yang, Shumin
APPLICANT: Preitz, Matthew J.
APPLICANT: Preitz, Matthew J.
APPLICANT: Preitz, Matthew J.
APPLICANT: Wonderling, Ranani S.
TITLE OF INVENTION: CANINE AND FELINE IMMUNOREGULATORY PROTEINS, NUCLEIC
TITLE OF INVENTION: ACID MOLECULES, AND USES THEREOF
TITLE OF INVENTION: ACID MOLECULES, AND USES THEREOF
FILE REFERENCE: IM-2-C2
CURRENT APPLICATION NUMBER: US/09/451,527
CURRENT FILING DATE: 1999-05-28
EARLIER APPLICATION NUMBER: 60/087,306
EARLIER APPLICATION NUMBER: 60/087,306
EARLIER FILING DATE: 1999-05-29
NUMBER OF SEQ ID NOS: 174
SOFTWARE: Patentin Ver. 2.0
SEQ ID NO 143
LENGTH: 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ö
                  APPLICANT: Dreitz, Matthew J.
APPLICANT: Wonderling, Ramani S.
TITLE OF INVENTION: CANINE AND FELINE IMMUNOREGULATORY PROTEINS, NUCLEIC TITLE OF INVENTION: CANINE AND USES THEREOF PILE REFERENCE: IM-2-C1
CURRENT APPLICATION NUMBER: US/09/322,409
CURRENT FILING DATE: 1990-05-29
EARLIER FILING DATE: 1998-05-29
NUMBER OF SEQ ID NOS: 154
SOFTWARE: Patentin Ver. 2.0
SEQ ID NO 143
LENGTH: 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Gaps
                                                                                                                                                                                                                                                                                                                                                                                 CTHER INFORMATION: Description of Artificial Sequence: Synthetic;
CTHER INFORMATION: Primer
US-09-322-409-143
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           OTHER INFORMATION: Description of Artificial Sequence: Synthetic OTHER INFORMATION: Primer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ô
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     DB 1; Length 20;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                DB 1; Length 20;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Query Match 0.3%; Score 15.8; D
Best Local Similarity 89.5%; Pred. No. 98;
Matches 17; Conservative 0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  0.3%; Score 15.8;
89.5%; Pred. No. 98;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ; Sequence 143, Application US/09451527
; Patent No. 6482403
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               3920 ATGGCTCTCTGGTTGGCTG 3938
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        3920 ATGGCTCTCTGGTTGGCTG 3938
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1 Arkackacrerekrigaere 19
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Arcecercicerricacie 19
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ORGANISM: Artificial Sequence
                                                                                                                                                                                                                                                                                                                        TYPE: DNA ORGANISM: Artificial Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    17; Conservative
Yang, Shumin
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 GENERAL INFORMATION:
APPLICANT: Sim, Gek-Kee
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Query Match
Best Local Similarity
Matches 17; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ; US-09-451-527-143
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               US-09-451-527-143
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         d
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                g
```

Sequence 5, Application US/09645021; Patent No. 6589726; GENERAL INFORMATION:

RESULT 103 US-09-645-021-5

```
TSUTOMU
THOMS SUPPRESSOR GENE AND METHODS FOR
DETECTION OF CANCER, MONITORING OF TUMOR PROGRESSION AND CANCEF
TREATMENT
APPLICANT: Butler, John H.

APPLICANT: Breman, Thomas M.

TITLE OF INVENTION: METHOD APPARATUS FOR IN SITU SYNTHESIS ON A SOLID SUPPORT FILE REFERENCE: 05871.002.CPUS04

CURRENT APPLICATION NUMBER: US/09/645,021

CURRENT FILING DATE: 2000-08-23

PRIOR FILING DATE: 1999-05-18

PRIOR FILING DATE: 1999-05-18

PRIOR FILING DATE: 1995-06-06

NUMBER OF SEQ ID NOS: 10

SOFTWARE: PRIOR THOMASI: 100

SOFTWARE: PRIOR PRIOR DATE: 100

SOFTWARE: PRIOR DATE: PRIOR DAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ; OTHER INFORMATION: Description of Artificial Sequence:Oligo 952
US-09-456-090A-4
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Length 20;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Length 20;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         APPLICANT: Buechler, Joe
APPLICANT: Buechler, Joe
APPLICANT: Valkirs, Gunars
APPLICANT: Cary, Jeff
APPLICANT: Lonberg, Nils
TITLE OF INVENTION: HUMAN ANTIBODIES AS DIAGNOSTIC REAGENTS
FILE REFERENCE: 020015-000200US
CURRENT APPLICATION NUMBER: US/09/456,090A
CURRENT FILING DATE: 1999-12-06
NUMBER OF SEQ ID NOS: 110
SOFTWARE: PATENTIN Ver. 2.1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Score 15.8; DB 1;
Pred. No. 98;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              DB
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             FEATURE:
, OTHER INFORMATION: Synthetic oligonucleotide
US-09-645-021-5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Score 15.8;
Pred. No. 98;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      RESULT 105
US-08-227-800A-6/c
; Sequence 6, Application US/08227800A
; Patent No. 6689561
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Sequence 4, Application US/09456090A; Patent No. 6680209; GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      4769 TGACTGACTGACTAAATGA 4787
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            366 CCTCCACCAACAGCCCATC 384
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      2 rgacrgacrgacrga 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         DENNIS A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            cerceaceaaggeceare
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Query Match
Best Local Similarity 89.5%;
Matches 17; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TYPE: DNA
ORGANISM: Artificial Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TYPE: DNA
ORGANISM: Artificial sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Query Match 0.3%;
Best Local Similarity 89.5%;
Matches 17; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      GENERAL INFORMATION:
APPLICANT: CARSON, DENNI
APPLICANT: NOBORI, TSUTO
TITLE OF INVENTION: TUMO
TITLE OF INVENTION: DETE
TITLE OF INVENTION: TREA
NUMBER OF SEQUENCES: 18
CORRESPONDENCE ADDRESS:
```

```
ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Gapa
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Gape
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence: Oligo 952
US-09-453-234-4
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Length 20;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Length 20;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 IndelB
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                             /note= "CDK41' primer'
                                                                                              NAME: Hinsch, Matchew E.
REGISTRATION NUMBER: 47,651
REFERENCE/DOCKET NUMBER: 023070-104042US
TELECOMMUNICATION INFORMATION:
TELEPHONE: (415) 576-0200
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           DB 1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             DB 1;
      APPLICATION NUMBER: US/09/908,671A
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       0.3%; Score 15.8; C
89.5%; Pred. No. 98;
tive 0; Mismatches
                        FILING DATE: 18-Jul-2001
APPLICATION NUMBER: US 08/921,954
FILING DATE: 20-AUG-1997
ATTORNEY/AGENT INPORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Query Match 0.3%; Score 15.8; E
Best Local Similarity 89.5%; Pred. No. 98;
Matches 17; Conservative 0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      APPLICANT: Buechler, Joe
APPLICANT: Buechler, Joe
APPLICANT: Buechler, Joe
APPLICANT: Gray, Jeff
APPLICANT: Conberg, Nils
APPLICANT: Lonberg, Nils
APPLICANT: Blosite Diagnostics, Inc.
APPLICANT: Genblarm International
TITLE OF INVENTION: Human Antibodies
FILE REFERENCE: 020015-000110US
CURRENT APPLICATION NUMBER: US/09/453,234
CURRENT FILING DATE: 1999-12-01
                                                                                                                                                                                                                                                                                                                                                                                                                         SEQUENCE DESCRIPTION: SEQ ID NO: 6: US-08-921-954-6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      PRIOR APPLICATION NUMBER: US 60/157,415 PRIOR FILING DATE: 1999-10-02
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       4079 GGTTCCAGTTGCCAATTTC 4097
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        US-08-632-598-29/c
; Sequence 29, Application US/08632598
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Sequence 4, Application US/09453234
Patent No. 6794132
                                                                                                                                                                                              TELEFAX: (415) 576-0300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         366 CCTCCACCAACAGCCCATC 384
                                                                                                                                                                                                              INFORMATION FOR SEQ ID NO: 6:
SEQUENCE CHARACTERISTICS:
LENGTH: 20 base pairs
TYPE: mucleic acid
STRANDEDNESS: single
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       20 GCTTCCAGTTTCCAATTTC 2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             19 cerceaeceaeceare 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TYPE: DNA
ORGANISM: Artificial Sequence
                                                                                                                                                                                                                                                                                                                                                                   NAME/KEY: -
LOCATION: 1..20
OTHER INFORMATION:
                                                                                                                                                                                                                                                                                                      TOPOLOGY: linear MOLECULE TYPE: DNA FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               NUMBER OF SEQ ID NOS: 112
SOFTWARE: Patentin Ver. 2.1
SEQ ID NO 4
LENGTH: 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Query Match 0.3
Best Local Similarity 89.5
Matches 17; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      JS-09-453-234-4/C
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      RESULT 108
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         d
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      APPLICANT: Carson, Dennis A.
No. 6689864ori, Tsutomu
TITLE OF INVENTION: Tumor Suppressor Gene and Methods for
Detection of Cancer, Monitoring of Tumor Progression and
Cancer Treatment
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CITY: San Prancisco
CITY: San Prancisco
COUNTRY: USA
ZIP: 94111-3834
COMPUTER READABLE FORM:
MADIUM TYPE: Floppy disk
COMPUTER: IBM FOC. Compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.30
CURRENT APPLICATION DATE: 26-Aug-1997
FILING DATE: 26-Aug-1997
CLASSIFICATION: AUNKNOWN>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        DB 1; Length 20;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     NUMBER OF SEQUENCES: 28
CORRESPONDENCE ADDRESS:
ADDRESSEE: Townsend and Townsend and Crew LLP
STREET: Two Embarcadero Center, Eighth Floor
                                                                                                                                                                                ADDRESSEE: Fish & Richardson P.C. STRET: 425 Executive Square, Suite 1400 STATE: La Johla STATE: California
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    0.3%; Score 15.8; D
89.5%; Pred. No. 98;
tive 0; Mismatches
                                                                                                                                    MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  4079 GGTTCCAGTTGCCAATTTC 4097
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                US-08-921-954-6/c; Sequence 6, Application US/08921954; Patent No. 6689864; GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      20 GCTTCCAGTTTCCAATTTC 2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               MOLECULE TYPE: DNA (genomic)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Query Match 0.3
Best Local Similarity 89.5
Matches 17; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TYPE: nucleic acid
STRANDEDNESS: single
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 IMMEDIATE SOURCE:
CLONE: CDK41' primer
                                                                                                                COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             roPoLOGY: linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           NAME/KEY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               LOCATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                US-08-227-800A-6
```

ઠ 요

```
; LOCATION: 1..21
; OTHER INFORMATION: downstream amplification primer 99-17833 for SEQ 862, in complemer
US-09-422-978-8727
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Sequence 8127, Application US/09422978

Sequence 8127, Application US/09422978

Patent No. 6537751

GENERAL INFORMATION:
APPLICANT: Chumakov, Ilya
APPLICANT: Chumakov, Ilya
TITLE OF INVENTION: Biallelic markers for use in constructing a high density...
TITLE OF INVENTION: Biallelic markers for use in constructing a high density...
TITLE TREPERENCE: GENSET.020CP1
CURRENT APPLICATION NUMBER: US/09/422, 978
CURRENT FILING DATE: 1999-10-20
EARLIER FILING DATE: 1999-10-20
EARLIER APPLICATION NUMBER: US 60/109,732
EARLIER APPLICATION NUMBER: US 60/109,732
EARLIER APPLICATION NUMBER: US 60/109,732
EARLIER PILING DATE: 1998-11-23
EARLIER FILING DATE: 1998-14-21

SEQIID NO 8727

SEQIID NO 8727
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               .;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Score 15.8; DB 1; Length 21;
Pred. No. 1e+02;
0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       0.3%; Score 15.8; DB 1; Length 21; 89.5%; Pred. No. 1e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Indels
                                                                                                                                                                                                                                                                                                            223355/SEE50112/US
             APPLICATION:
FILING DATE:
CLASSIFICATION:
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 08/632,598
FILING DATE:
ATTORNEY/AGENT INFORMATION:
NAME: KOKULIS, PAUL N.
REGISTRATION NUMBER: 16,773
REPERRENCE/DOCKET NUMBER: 22335/
TELECOMMUNICATION INFORMATION:
TELECOMMUNICATION INFORMATION IN
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/231,240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              4736 TTTTCAAAATTATGTCTCC 4754
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             2880 GAAGAAGTTGCTCTCACAG 2898
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           3 rrrrcaaaargarcrccc 21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      21 gaagaagargcrcrccag 3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          0.3%;
                                                                                                                                                                                                                                                                                                                                                                                      TELEFAX: 822-0947
TELEX: 6714627 CUSH
INFORMATION FOR SEQ ID NO: 7
SEQUENCE CHARACTER.ESTICS:
'FUNTH: 21 base pairs
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Query Match 0.3
Best Local Similarity 89.5
Matches 17; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             17; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TYPE: nucleic acid
STRANDEDNESS: single
TOPOLOGY: linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TYPE: DNA
ORGANISM: Homo Sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ) ORGANISM: AVOCADO
) IMMEDIATE SOURCE:
) CLONE: 5' PRIMER
US-09-231-240-29
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              FEATURE:
NAME/KEY: primer_bind
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Query Match
Best Local Similarity
Matches 17; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TOPOLOGY: line:
MOLECULE TYPE: cl
ORIGINAL SOURCE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     US-09-422-978-8727
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            엄
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 RESULT 109
US-09-231-240-29/c
; Sequence 29, Application US/09231240
; Sequence 29, Application US/09231240
; Belent No. 6262346
; GENERAL INFORMATION:
; APPLICANT: BIRD, COLIN R
; TITLE OF INVENTION: RIPENING-RELATED GENES FROM BANANA
; TITLE OF SEQUENCES: 50
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: CUSHWAN DARBY AND CUSHMAN
; STREET: 1100 NEW YORK AVENUE N.W.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Score 15.8; DB 1; Length 21; Pred. No. 1e+02; 0; Mismatches 2; Indels
                                 GENERAL INFORMATION:
APPLICANT: BIRD, COLIN R
APPLICANT: BIRD, COLIN R
APPLICANT: FLETCHER, JONATHON D
TITLE OF INFORMATION: RIPENING-RELATED GENES FROM BANANA
NUMBER OF SEQUENCES: 50
CORRESPONDENCE ADDRESS: ADDRESS: CUSHMAN DARBY AND CUSHMAN
STREET: 1100 NEW YORK AVENUE N.W.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                COUNTRY: USA
COUNTRY: USA
COMPUTER READABLE FORM:
MEDIUT TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWATER: Patentin Release #1.0, Version #1.25
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   COMPUTER: IBM PC_compatible
OPERATING SYSTEM: PC_DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/632,598
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 223355/SEE50112/US
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       2880 GAAGAAGTTGCTCTCACAG 2898
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             FILING DATE:
CLASSIFICATION: 435
ATTORNEY/AGENT INFORMATION:
NAME: KOKULIS, PAUL N.
REGISTRATION NUMBER: 16,773
REFERENCE/DOCKET NUMBER: 22335
TELEPHONE: 861-3000
TELEPHONE: 861-3000
TELEPHONE: 614627 CUSH
INFORMATION FOR SEQ ID NO: 29:
SEQUENCE CHARACTERISTICS:
LENGTH: 21 base pairs
TYPE: NUCLEIC SCOTOL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       21 GAAGAAGGTGCTCTCCCAG 3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Query Match
Best Local Similarity 89.5%;
Matches 17; Conservative
                                                                                                                                                                                                                                                                                                                                                              COUNTRY: USA
ZIP: 20005-3918
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      STRANDEDNESS: single
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ORGANISM: AVOCADO
; IMMEDIATE SOURCE:
; CLONE: 5' PRIMER
US-08-632-598-29
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      MOLECULE TYPE:
ORIGINAL SOURCE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          В
```

gibbs-10-667-022-4.rn1

```
Sequence 1, Application US/09904744

Sequence 1, Application US/09904744

Sequence 1N. 6828142

GENERAL INFORMATION:

APPLICANT: Barbera-Guillem, Emilio

APPLICANT: Castro, Stephanie

TITLE OF INVENTION: Manocrystals having polynucleotide strands and their use to form

TITLE OF INVENTION: Manocrystals having polynucleotide strands and their use to form

TITLE OF INVENTION: Manocrystals having polynucleotide strands and their use to form

TITLE OF INVENTION: dendrimers in a signal amplification system

FILE REFERENCE: B-73

CURRENT FILING DATE: 2001-07-13

PRIOR APPLICATION NUMBER: 09/437076

PRIOR APPLICATION NUMBER: 09/437076

PRIOR PILING DATE: 1999-11-09

PRIOR PILING DATE: 1999-11-0

NUMBER OF SEQ ID NOS: 6

SOFTWARE: PatentIn version 3.0

SEQ ID NO 1

LENGTH: 18

TURE OF TABLES OF
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Conditions Related
                                                                                                                                                                                                                                                                                                                                                                                      APPLICANT: Pavco, Pam
APPLICANT: McSwiggen, Jim
APPLICANT: Stinchcomb, Dan
TITLE OF INVENTION: Method and Reagent for Treatment of Diseases or Conditions
TITLE OF INVENTION: Levels of Vascular Endothelial Growth Factor Recptor
FILE REFERENCE: MBHB00-876-K (400/021)
CURRENT FILING DATE: 1200-10-10
FRIOR APPLICATION NUMBER: US 60/005, 974
FRIOR FILING DATE: 1956-01-08
FRIOR PILING DATE: 1995-08-10
FRIOR APPLICATION NUMBER: US 09/371, 772
FRIOR FILING DATE: 1999-08-10
NUMBER OF SEQ ID NOS: 8231
SEQ ID NO 1077
FEATURE DATE: 1991-08-10
SEQ ID NO 1077
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Score 15.4; DB 1; Length 17;
Pred. No. 92;
0; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 DB 1; Length 18;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Query Match
0.3%; Score 15.4; I
Best Local Similarity 94.1%; Pred. No. 98;
Matches 16; Conservative 0; Mismatches
                                                                                                                                                                            RESULT 113
US-09-685-664B-1077/C
; Sequence 1077, Application US/09685664B
; Patent No. 6818447
; GENERAL INFORMATION:
; APPLICANT: Ribozyme Pharmaceuticals, Inc.
5023 GTAAAAAAAAAAA 5039
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         5022 TGTAAAAAAAAAA 5038
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ; OTHER INFORMATION: synthesized US-09-904-744-1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TYPE: DNA ORGANISM: Artificial Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  17 TGGAAAAAAAAAAA 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Query Match
Best Local Similarity 94.1%;
Matches 16; Conservative
                                                                    17 GGAAAAAAAAAAAAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TYPE: RNA
CORGANISM: Homo sapiens
US-09-685-664B-1077
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      a
   ò
                                                     셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 8
                                                                                                                                                                                                                                         APPLICANT: Ribozyme Plantmaceuticals, Inc.
APPLICANT: Ribozyme Plantmaceuticals, Inc.
APPLICANT: RoSudgen, Jam
APPLICANT: Bevco, Pam
APPLICANT: Stinchcomb, Dan
APPLICANT: Stinchcomb, Dan
APPLICANT: Stinchcomb, Jaime
TITLE OF INVENTION: Method and Reagent for Treatment of Diseases or Conditions Relate
TITLE OF INVENTION: Method and Reagent for Treatment of Diseases or Conditions Relate
TITLE OF INVENTION: Levels of Vascular Endothelial Growth Factor Recptor
TITLE OF INVENTION: Levels of Vascular Endothelial Growth Factor Recptor
CURRENT APPLICATION NUMBER: US 09/695, 664B
CURRENT PILING DATE: 1995-10-26
PRIOR FILING DATE: 1995-01-08
PRIOR FILING DATE: 1996-01-08
PRIOR FILING DATE: 1996-01-08
PRIOR FILING DATE: 1999-08-10
NUMBER OF SEQ ID NOS: 8231
SOFTWARE: Patentin version 3.0
SEQ ID NO 1073
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       APPLICANT: Favo., raum
APPLICANT: Favo., raum
APPLICANT: Stinchcomb, Dan
APPLICANT: Stinchcomb, Dan
APPLICANT: Escobedo, Jaime
APPLICANT: Escobedo, Jaime
TITLE OF INVENTION: Method and Reagent for Treatment of Diseases or Conditions Relate
TITLE OF INVENTION: Levels of Vascular Endothelial Growth Factor Recptor
FILE REFERENCE: MBHB00-876-K (400/021)
CURRENT APPLICATION NUMBER: US 60/005,974
PRIOR APPLICATION NUMBER: US 60/005,974
PRIOR PILING DATE: 1995-01-08
PRIOR FILING DATE: 1995-01-08
PRIOR FILING DATE: 1996-01-08
PRIOR FILING DATE: 1996-08-10
NUMBER OF SEQ ID NOS: 8231
SOCTHWARE: PatentIn version 3.0
SEQ ID NO 1076
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    DB 1; Length 17;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      DB 1; Length 17;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              0.3%; Score 15.4; Di
94.1%; Pred. No. 92;
tive 0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Score 15.4; D
Pred. No. 92;
0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               GENERAL INFORMATION:
APPLICANT: Ribozyme Pharmaceuticals, Inc.
APPLICANT: Pavco, Pam
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    3.09-685-664B-1076/c
Sequence 1076, Application US/09685664B
Patent No. 6818447
                                                                                                                                             Sequence 1073, Application US/09685664B
Patent No. 6818447
GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  5050 AAAAAAAAAAAAAACT 5066
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           17 AAAAAAAAAAAAGT 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Query Match
Best Local Similarity 94.1%;
Matches 16; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Query Match 0.3
Best Local Similarity 94.1
Matches 16; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ; ORGANISM: Homo sapiens
US-09-685-664B-1073
```

g

```
19 GAATTCGGCACGAGGGG 35
                                                                                                                                                                                                                                                                                                                         TYPE: DNA
ORGANISM: Artificial Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       20 GAATTCGGCACGAGCGG 4
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          STATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        RESULT 117
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       g
                                                                                                 APPLICANT: Labigne, Agnes
APPLICANT: Labigne, Agnes
APPLICANT: Sauerbaum, Sebastien
APPLICANT: Sauerbaum, Sebastien
APPLICANT: Ferrero, Richard L.
APPLICANT: Thiberge, Jean-Michel
TITLE OF INVENTION: IMMUNOGENIC COMPOSITIONS AGAINST
TITLE OF INVENTION: COMPOSITIONS, AND NUCLEIC ACID SEQUENCES ENCODING SAID
TITLE OF INVENTION: POLYPEPTIDES
TITLE OF INVENTION: POLYPEPTIDES
NUMBER OF SEQUENCES: 44
CORRESPONDENCE ADDRESS:
ADDRESSEE: Finnegan, Henderson, Farabow, Garrett & ADDRESSEE: Dunner
STREET: 1300 I Street, N.W.
CITY: Washington
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       0.3%; Score 15.4; DB 1; Length 20; lilarity 94.1%; Pred. No. 1.1e+02; Conservative 0; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               LOCATION: 1..6 OTHER INFORMATION: /note= "Restriction site introduced oTHER INFORMATION: in the amplified fragment (BamHI)."
US-08-467-822-6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATUR SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
FILING DATE: 06-JUN-1995
CLASSIFICATION: 435
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CLASSIFICATION DATA:
PRIOR APPLICATION NUMBER: US 08/447,177
APPLICATION NUMBER: US 08/447,177
FILING DATE: US 08/432,697
CLASSIFICATION DATA:
APPLICATION NUMBER: US 08/432,697
FILING DATE: 03-MAY-1995
CLASSIFICATION: 435
ATTORNEY,AGENT INFORMATION:
NAME: MAYERS, Kenneth J.
REGISTRATION NUMBER: 25,146
REFERENCE/DOCKET NUMBER: 03495.0137-02000
TELEPHONE: (202) 408.4000
                                                                                                                            US-08-467-822-6/c
; Sequence 6, Application US/08467822
Patent No. 5843460
; GENERAL INFORMATION:
APPLICANT: Labigne, Agnes
APPLICANT: Sauerbaum, Sebastien
APPLICANT: Perrero, Richard L.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1800 TGAAATCCTTTTGGATC 1816
5023 GTAAAAAAAAAAAA 5039
                                        2 ССАДАДАДАДАДАДАД 18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TELECUMENTE: (202) 405-707
TELEPHONE: (202) 408-4400
INFORMATION FOR SEQ ID NO: 6: SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TOPOLOGY: linear
MOLECULE TYPE: DNA (genomic)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           NAME/KEY: misc_feature LOCATION: 1..6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              LENGTH: 20 base pairs
TYPE: nucleic acid
STRANDEDNESS: single
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Query Match
Best Local Similarity
Matches 16; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  COUNTRY: USA
ZIP: 20005-3315
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ઠ
```

18 TGAAATCTTTTTGGATC 2

```
GENERAL INFORMATION:
APPLICANT: Labigne, Agnes
APPLICANT: Labigne, Agnes
APPLICANT: Farero, Richard L.
APPLICANT: Ferrero, Richard L.
APPLICANT: Priberge, Jean-Michel
TITLE OF INVENTION: IMMUNOGENIC COMPOSITIONS AGAINST
TITLE OF INVENTION: HELICOBACTER INFECTION, POLYPEPTIDES FOR USE IN THE
TITLE OF INVENTION: POLYPEPTIDES
TITLE OF INVENTION: POLYPEPTIDES
NUMBER OF SEQUENCES: 44
CORRESPONDENCE: 44
Sequence 8, Application US/09357070

Sequence 8, Application US/09357070

Patent No. 6046049

GENERAL INFORMATION:
APPLICANT: Brett P. Monia
TITLE OF INVENTION:
TITLE OF INVENTION: NATISENSE MODULATION OF PI3 KINASE P110 DELTA EXPRESSION
FILE REFERENCE: RTS-0076
CURRENT APPLICATION NUMBER: US/09/357,070
CURRENT FILING DATE: 1999-07-19
NUMBER OF SEQ ID NOS: 47

LENGTH: 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Length 20;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ADDRESSEE: Finnegan, Henderson, Farabow, Garrett &
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              COUNTRY: USA

ZIP: 2005-3315

COMPUTER READBLE FORM:
MEDIUW TYPE: Floppy disk
COMPUTER: IBM PC COMPATIBLE
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PATONIIN Release #1.0, Version #1.30

CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/432,697
FLING DATE: 02-MAY-1995
CLASSIETCATION: 424
ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Query Match

0.3%; Score 15.4; DB 1;
Best Local Similarity 94.1%; Pred. No. 1.1e+02;
Matches 16; Conservative 0; Mismatches 1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       NAME: Meyers, Kenneth J.
REGISTRATION NUMBER: 25,146
REFERENCE/POCKET NUMBER: 03495.0137-00000
TELECOMMUNICATION INFORMATION:
TELEPHONE: (202) 408-4000
                                                                                                                                                                                                                                                                                                                                                                                                                                 ), OTHER INFORMATION: Antisense Oligonucleotide US-09-357-070-8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    US-08-432-697-6/c; Sequence 6, Application US/08432697; Patent No. 6248330
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ADDRESSEE: Dunner
STREET: 1300 I Street, N.W.
CITY: Washington
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TELEFAX: (202) 408-4400 INFORMATION FOR SEQ ID NO: 6 SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            20 base pairs
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TYPE: nucleic acid
```

**Gaps** 

ö

```
OTHER INFORMATION: Description of Artificial Sequence: No. 6451968el Sequence: NAME/KEY: misc_feature
NAME/KEY: misc_feature
LOCATION: (10)...(11)
OTHER INFORMATION: Ethylene Glycol, Ethylene Glycol
OTHER INFORMATION: Linkage
NAME/KEY: misc_feature
COTHER INFORMATION: N is Pseudoisocytosine
NAME/KEY: misc_feature
NAME/KEY: misc_feature
COTHER INFORMATION: N is Pseudoiscytosine
OTHER INFORMATION: N is Pseudoiscytosine
COTHER INFORMATION: N is Pseudoiscytosine
US-08-275-951-49
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Length 20;
                                                                                                                                                   Length 20;
                           LOCATION: 1..6

; OTHER INFORMATION: /note= "Restriction site introduced

; OTHER INFORMATION: in the amplified fragment (BamHI)."

US-08-466-248-6
                                                                                                                                                                                                   1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      APPLICANT: NellBuchard, Cole APPLICANT: Dueholm, Kim L. APPLICANT: Dueholm, Kim L. APPLICANT: Dueholm, Kim L. APPLICANT: Dueholm, Kim L. TILE APPLICANT: Christenean, Laiked Peptide Nucleic Acids FILE REFERENCE: ISISIS77
CURRENT APPLICATION NUMBER: US/08/275,951
CURRENT FILING DATE: 1993-07-15
PRIOR FILING DATE: 1993-11-22
PRIOR FILING DATE: 1993-11-22
PRIOR APPLICATION NUMBER: 08/088,661
PRIOR FILING DATE: 1993-07-02
PRIOR PLING DATE: 1993-07-02
PRIOR PLING DATE: 1991-05-22
PRIOR PLING DATE: 1991-05-22
PRIOR FILING DATE: 1991-04-15
PRIOR FILING DATE: 1991-04-15
NUMBER OF SEQ ID NOS: 65
SOFTWARE: Patentin Ver. 2.1
SEQ ID NO 49
LENGTH: 20
                                                                                                                                                 0.3%; Score 15.4; DB 1;
94.1%; Pred. No. 1.1e+02;
tive 0; Mismatches 1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Score 15.4; DB 1;
Pred. No. 1.1e+02;
0; Mismatches 2;
                                                                                                                                                                                                                                                                                                                                                                                                                  Sequence 49, Application US/08275951
Patent No. 6451968
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  5025 AAAAAAAAAAAAAA 5042
                                                                                                                                                                                                                                             1800 TGAAATCCTTTTGGATC 1816
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               19 AAAAAANAAAAGAAAAA 2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TYPE: DNA ORGANISM: Artificial Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Match 0.3%;
Local Similarity 88.9%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                             GENERAL INFORMATION:
APPLICANT: Egholm, Michael
APPLICANT: Kiely, John
APPLICANT: Griffin, Michael
APPLICANT: Coull, James M.
APPLICANT: Neilsen, Peter
                                                                                                                                                                                                                                                                                             18 reaaarcririreaarc
       NAME/KEY: misc_feature
                                                                                                                                                                          Best Local Similarity 94.1
Matches 16, Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  16; Conservative
                                                                                                                                                                                                                                                                                                                                                                   RESULT 119
US-08-275-951-49/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              APPLICANT:
APPLICANT:
APPLICANT:
APPLICANT:
APPLICANT:
                                                                                                                                                   Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Matches
                                                                                                                                                                                                                                                  ઠે
                                                                                                                                                                                                                                                                                        셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Sequence 6, Application US/08466248

Patent No. 6258359
GENERAL INFORMATION:
APPLICANT: Labigne, Agnes
APPLICANT: Sauerbaum, Sebastien
APPLICANT: Ferrero, Richard L.
APPLICANT: Friberge, Jean-Michel
TITLE OF INVENTION: IMMUNOGRNIC COMPOSITIONS AGAINST
TITLE OF INVENTION: POLYPEPTIDES FOR USE IN THE
TITLE OF INVENTION: POLYPEPTIDES
NUMBER OF SEQUENCES: 44
CORRESPONDENCES: 44
ADDRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                               ö
                                                                                                                                                                                                                                                                                               Gaps
                                                                                                                                                                                                                                                                                               .;
0
                                                                                                                                                                                                                                           Query Match 0.3%; Score 15.4; DB 1; Length 20; Best Local Similarity 94.1%; Pred. No. 1.1e+02; Matches 16; Conservative 0; Mismatches 1; Indels
                                                                                            COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
COMPTOTER: IBM PC compatible
CORTATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/466,248
FILING DATE: 06-JUN-1995
CLASSIFICATION DATA:
APPLICATION NUMBER: US 08/447,177
FILING DATE: 19-MAY-1995
CLASSIFICATION BATA:
APPLICATION NUMBER: US 08/417,177
FILING DATE: 19-MAY-1995
CLASSIFICATION DATA:
APPLICATION NUMBER: US 08/412,697
FILING DATE: 02-MAY-1995
CLASSIFICATION: 435
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ADDRESSEE: Finnegan, Henderson, Farabow, Garrett
ADDRESSEE: Dunner
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ATTORNEY/AGENT INFORMATION:
NAME: Meyers, Kenneth J.
REGISTRATION NUMBER: 25,146
REFERENCE/DOCKET NUMBER: 03495.0137-02000
                                                                                                                                                                                                                                                                                                                                          1800 TGAAATCCTTTTGGATC 1816
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TELECOMMUNICATION INFORMATION:
TELEPHONE: (202) 408-4000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             STREET: 1300 I Street, N.W. CITY: Washington
STRANDEDNESS: single
TOPOLOGY: linear
MOLECULE TYPE: DNA (genomic)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TOPOLOGY: linear
MOLECULE TYPE: DNA (genomic)
FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                       18 rcaarcririrgarc 2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TELEFAX: (202) 408-4400
INFORMATION FOR SEQ ID NO: 6
SEQUENCE CHARACTERISTICS:
LENGTH: 20 base pairs
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TYPE: nucleic acid
STRANDEDNESS: single
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        US-08-466-248-6/C
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          COUNTRY:
```

ö

Gapa

```
Query Match 0.33
Best Local Similarity 94.13
Matches 16; Conservative
                                                                                                                                                                                                                                                                                                                                           STATE: CA
COUNTRY: USA
ZIP: 94304-1018
COMPUTER READABLE FORM:
MEDIUM TYPE: Diskette
                                                                                                                                                                                                                                                                                                                                                                                                                                                  Diskette
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       single
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  nucleic acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       STRANDEDNESS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  APPLICANT:
APPLICANT:
APPLICANT:
US-09-081-385-98
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        US-09-081-385-98
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   엄
                                    Sequence 6200, Application US/09422978

Sequence 6200, Application US/09422978

Patent No. 6537751

GENERAL INFORMATION:

APPLICANT: Cohen, Daniel

APPLICANT: Chumakov, 11ya

TITLE OF INVENTION: Biallelic markers for use in constructing a high density...

FILE REFERENCE: GENSET, 0220CP1

CURRENT FILING DATE: 1999-10-20

EARLIER FILING DATE: 1999-04-21

SEARLIER APPLICATION NUMBER: US 60/109,732

EARLIER PILING DATE: 1998-11-23

BARLIER FILING DATE: 1998-11-23

SEARLIER FILING DATE: 1998-10-21

SARLIER FILING DATE: 1998-10-21

NUMBER: OS SO ID NOS: 11796

SARLIER FILING DATE: 1998-10-21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  NAME/KEY: primer_bind
LOCATION: 1..20
J. OTHER INFORMATION: upstream amplification primer 99-10046 for SEQ 2266,
US-03-422-978-6200
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      PAPELICANT: DESCRIPTION:

GENERAL INFORMATION:

APPLICANT: BARTHOLOMEUSZ, ANGELINE I
APPLICANT: APELICANT: STEPHEN A
APPLICANT: APELICANT: ANGELINE I
APPLICANT: DEMAN, ROBERT A
TITLE OF INVENTION: VIRAL VARIANTS AND METHODS FOR DETECTING SAME
TITLE OF INVENTION: 1959-05-06
FILE REPERENCE: 2551-28
CURRENT APPLICATION NUMBER: PCT/AU97/00520
FRIOR APPLICATION NUMBER: PCT/AU97/00520
FRIOR APPLICATION NUMBER: PO3519
FRIOR FILING DATE: 1997-08-15
FRIOR FILING DATE: 1996-11-08
NUMBER OF SEQ ID NOS: 57
SOFTWARE: PatentIn Ver: 2.0
SEQ ID NO 6
LENGTH: 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        0.3%; Score 15.4; DB 1; Length 20; 94.1%; Pred. No. 1.1e+02; ive 0; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        0.3%; Score 15.4; DB 1; Length 20; 94.1%; Pred. No. 1.1e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Pred. No. 1.1e
0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sequence 6, Application US/09306420C Patent No. 6555311
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             4356 GAAAATAAGGTTTTGGG 4372
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            525 TTATATCCTAACCTTAC 541
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        3 rrcrarccraaccraac 19
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              GAAAATAATGTTTTGGG 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TYPE: DNA ORGANISM: Hepatitis B virus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Query Match 0.3
Best Local Similarity 94.1
Matches 16, Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Best Local Similarity 94.1
Matches 16; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TYPE: DNA
ORGANISM: Homo Sapiens
                                 -09-422-978-6200/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          US-09-306-420C-6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         US-09-306-420C-6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ઠે
```

```
4424 CATCTGTGTCCTACTACAGG 4443
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        US-08-598-591-57; Application US/08598591; Sequence 57, Application US/08598591; Patent No. 5654155; GENERAL INFORMATION: APPLICANT: Allen, Antonette C.; APPLICANT: Alvares, Christopher:
                            NAME: MURASHIGE, KATE H.
REGIGSTRATION NUMBER: 29,959
REFERENCE/DOCKET NUMBER: 4511
TELECOMMUNICATION INFORMATION:
TELEPHONE: (415) 494-0792
TELEX: (415) 494-0792
TELEX: 76141
INFORMATION FOR SEQ ID NO: 14:
SEQUENCE CHARACTERISTICS:
LENGTH: 20 base pairs
TYPE: nucleic acid
TYPE: nucleic acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  20 cárcidericciacircade 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            INFORMATION FOR SEQ 1D NO: 57: SEQUENCE CHARACTERISTICS: LENGRE DAIRS TYPE: nucleic acid STRANDEDNESS: not relevant
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TOPOLOGY: linear
MOLECULE TYPE: DNA (genomic)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Query Match
Best Local Similarity 85.0%;
Matches 17; Conservative
   ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        19F primer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CITY: Alexandria
                                                                                                                                                                                                                                                                                                                                                                                                                                                   linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ORIGINAL SOURCE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            USA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        COUNTRY: UK
ZIP: 22314
                                                                                                                                                                                                                                                                                                                                                                                                                                               TOPOLOGY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ;
US-08-598-591-57
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               US-08-406-635-14
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            RESULT 125
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Gaps
                            ADDRESSEE: Woodcock, Washburn, Kurtz, Mackiewicz & No. 5558988ris
STREET: One Liberty Place, 46th floor
CITY: Philadelphia
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Sequence 14, Application US/08406635
| Sequence 14, Application US/08406635
| Patent No. 5599674
| GENERAL INFORMATION |
| APPLICANT: SIMPSON, ANDREW J.G. |
| APPLICANT: SIMPSON, ANDREW J.G. |
| TITLE OF INVENTION: METHOD FOR RECOGNITION OF THE NUCLEOTIDE |
| TITLE OF INVENTION: SEQUENCE OF A FURIFIED DNA SEGMENT |
| NUMBER OF SEQUENCES: |
| ADDRESSEE: MORRISON & FOERSTER |
| STREET: 755 Page Mill Road |
| CITY: Palo Alto |
| STREET: California |
| COUNTRY: USA |
| COUNTRY: USA |
| COUNTRY: USA |
| COMPUTER: FLODPY disk |
| COMPUTER: TIBM PC Compatible |
| COMPUTER: TIBM PC Compatible |
| COMPUTER: TIBM PC COMPASSION |
| COMPASSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           0.3%; Score 15.2; DB 1; Length 20; 85.0%; Pred. No. 1.2e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  SOFTWARE: Patentin Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/406,635
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              0; Mismatches
                                                                                                                                                                                                                                    COMPUTER READABLE FURM:

MEDIUM TYPE: Bloppy disk
COMPUTER: IBM PC COMPATIBLE
OPERATING SYSTEM: PC-DOS/MS-DOS
SOGTWARE: WORDPerfect 5.1
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/0/977,284A
FILING DATE: 13-NOV-1992
CLASSIFICATION: 435
PRIOR APPLICATION DATA:
APPLICATION NUMBER:
FILING DATE: 13-NOV-1992
APPLICATION NUMBER:
FILING APPLICATION NUMBER:
ATTORNEY AGENT INFORMATION:
NAME: Deluca, Mark
REGISTRATION NUMBER: 33,229
REPREMENCE/DOCKET NUMBER: TJU-0697
TELECOMMUNICATION INFORMATION:
TELECOMMUNICATION INFORMATION:
TELECOMMUNICATION INFORMATION:
TELECOMMUNICATION FOR SEQ ID NO: 103:
SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CLASSIFICATION: 435
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/100,738
FILING DATE: 29-JUL-1993
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                3947 GGTCTTCAAGCAATGCGTGG 3966
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                20 gercricaggaargccreg 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 17; Conservative
                                                                                                                          STATE: PA
COUNTRY: USA
ZIP: 19103
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy di
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             SINGLE
CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              LENGTH: 20
TYPE: NUCLEIC ACID
STRANDEDNESS: SINGI
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ; TOPOLOGY: LINEAR;
; ANTI-SENSE: YES
US-07-977-284A-103
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     RESULT 124
US-08-406-635-14/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Matches
```

```
Gape
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       APPLICANT: Alvares, Christopher P.
APPLICANT: Alvares, Christopher P.
APPLICANT: Critz, Brenda S.
APPLICANT: Murphy Patricia D.
APPLICANT: Olson, Sheri J.
APPLICANT: Scholter, Denise B.
APPLICANT: Zeng, Bin
TITLE OF INVENTION: A Consensus Sequence of the Human BRCA1 Gene Patent No. 5654155
NUMBER OF SEQUENCES: 74
CORRESPONDENCE ADDRESS: ADDRESSE: BURNS, DOANE, SWECKER & MATHIS
STREET: 699 Prince St.
                                                                                                                                                                                                                                                                                                                                                           Length 20;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: Eloppy disk
COMPUTER: Eloppy disk
COMPUTER: Eloppy disk
COMPUTER: Elem PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/598,591
FILING DATE: herewith
CLASSIFICATION: 43.5
ATTORNEY/AGENT INFORMATION:
NAME: Swecker, Robert S.
REGISTRATION NUMBER: 19,885
REFERENCE/DOCKET NUMBER: 0.20160-282
TELEPHONE: 700-836.6620
                                                                                                                                                                                                                                                                                                                                                        Score 15.2; DB 1;
Pred. No. 1.2e+02;
0; Mismatches 3;
45119-20001.00
```

```
ZIP: 20877
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              MOLECULE TYPE: DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         HYPOTHETICAL:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CITY: Ga.
STATE: MI
                                                                                                                         STATE: M
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   US-08-233-005-8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           d
                                                                                                                                                                                                                   Sequence 7, Application US/08637902

Sequence 7, Application US/08637902

Parent No. 568383

GENERAL INFORMATION:
APPLICANT: Obashi, Tetsuo
APPLICANT: Tanaka, Reiko
TITLE OF INVENTION: Salmonella Species and Detection Process Using the Same
NUMBER OF SEQUENCES: 9
CORRESPONDENCE ADDRESS:
ADDRESSEE: Birch, Stewart, Kolasch and Birch
STREET: P.O. Box 747
CITY: Falls Church
STATE: VA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ö
                                               ö
                                            .
0
  0.3%; Score 15.2; DB 1; Length 20; 85.0%; Pred. No. 1.2e+02; tive 0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               0.3%; Score 15.2; DB 1; Length 20; 85.0%; Pred. No. 1.2e+02; tive 0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  SOFTWARE: Patentin Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/637,902
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ORGANISM: Salmonella typhimurium
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               COUNTRY: USA
ZIP: 22040-0747
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IRM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
                                                                                     4104 CTGTCATCCTTCCAGGGCTC 4123
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  387 CTGTCTATGAAGAAGACCC 406
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                FILING DATE:
CLASSIFICATION: 435
ATORNEY/AGENT INFORMATION:
NAME: Welner, Marc S
REGISTRATION NUMBER: 32,181
REFRENCE/DOCKET NUMBER: 1422
TELECOMMUNICATION INFORMATION:
TELEFAX: (703) 205-8000
TELEFAX: (703) 205-805
INFORMATION FOR SEQ ID NO: 7:
SEQUENCE CHARACTERISTICS:
LENGTH: 20 base pairs
TYPE: nucleic acid
TYPE: nucleic acid
STRANDENESS: single
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      US-08-233-005-8/c
; Sequence 8, Application US/08233005
; Patent No. 5710262
; GENERAL INFORMATION:
APPLICANT: Tedder, Thomas F.
                                                                                                                            1 crercarrerrerrerer 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         20 crercaareragaaceacec 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TOPOLOGY: linear
MOLECULE TYPE: genomic DNA
HYPOTHETICAL: NO
Query Match
Best Local Similarity 85.04
Matches 17; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Query Match 0.3
Best Local Similarity 85.0
Matches 17; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       IDENTIFICATION METHOD:
                                                                                                                                                                                                             JS-08-637-902-7/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           US-08-637-902-7
                                                                                       ð
```

```
APPLICANT: Zhou, Linna-Ji
WUMBER OF SEQUENCE:
SEQUENCE:
ADDRESS:
A
```

```
PRICE APPLICATION 5739
PRICE APPLICATION DATA:
APPLICATION NUMBER: US 08/565,391
FILING DATE: 11-07M-1996
PRICE APPLICATION DATA:
APPLICATION NUMBER: US 08/576,559
FILING DATE: 21-DEC-1995
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/575,359
FILING DATE: 20-DEC-1995
PRICE APPLICATION DATA:
APPLICATION NUMBER: US 08/573,779
FILING DATE: 18-DEC-1995
ATTORNEY/AGENT INFORMATION:
NAME: Inhen, Jeffrey L.
REGISTRATION NUMBER: 28,957
REFERRICE/DOCKET NUMBER: 24884-11680
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Sequence 120, Application US/08639501
Patent No. 5837492
GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          3746 CATCTGATAATGGTGCTGTC 3765
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    20 crrcrdardardardrdrdrc 1
                             ; INFORMATION FOR SEQ ID NO: 8:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 20 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: DNA (genomic)
; HYPOTHETICAL: NO
; ANTI-SENSE: NO
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Tavtigian, Sean V.
Kamb, Alexander
Simard, Jacques
Couch, Fergus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TELECOMMUNICATION INFORMATION: TELEPHONE: 202-962-4810
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               APPLICANT: Couch, Fergus
APPLICANT: Rommens, Johanna
APPLICANT: Weber, Barbara
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CORRESPONDENCE ADDRESS: 124
ADDRESSE: Venable, Bae
                                                                                                                                                                                                                                                                                                                                                                    Query Match
Best Local Similarity 85.0°
Matches 17, Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             INFORMATION FOR SEQ ID NO:
SEQUENCE CHARACTERISTICS
LENGTH: 20 base pairs
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     nucleic acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Washington
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       USA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  US-08-639-501-120/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 22204
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       APPLICANT:
APPLICANT:
APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    COUNTRY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   STATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  RESULT 130
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Score 15.2; DB 1; Length 20;
Pred. No. 1.2e+02;
0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                APPLICANT: Tedder, Thomas F.
APPLICANT: Zhou, Liang-Ji
TITLE OF INVENTION: LYMPHOCYTE ACTIVATION ANTIGENS AND
TITLE OF INVENTION: ANTIBODIES THERETO
NUMBER OF SEQUENCES: 15
CORRESPONDENCE ADDRESS:
SUBBESSEE: Weingarten, Schurgin, Gagnebin & Hayes
STREET: Ten Post Office Square
CITY: Boston
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/798,691
FILING DATE: 12-Feb-97
CLASSIFICATION: 435
ATORNEY/AGENT INFORMATION:
NAME: Thomas Gallegos
REGISTRATION NUMBER: 32,692
REGISTRATION NUMBER: 32,692
REGISTRATION NUMBER: 32,692
REGISTRATION NUMBER: 31,692
REGISTRATION STATE 
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            COMPUTER: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTMARE: PatentIn Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/428,943
FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CLAINS DALE:
CLAINS APPLICATION: 424

PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/233,005

PRIOR APPLICATION NUMBER: US 07/870,029

PRIOR DATE: 17-APR-1992

ATTORNEY/AGENT INFORMATION:
NAME: Holliday C. Heine, Ph.D.

REGISTRATION NUMBER: 34,346

REFERENCE/DOCKET NUMBER: DFCC-230BX

TELECHONE: (617) 542-2290
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               4104 CIGICAICCIICCAGGGCIC 4123
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1 crercarrerrerrers 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Sequence 8, Application US/08428943
Patent No. 5766570
GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     MOLECULE TYPE: DNA (genomic)
ORIGINAL SOURCE:
STRAIN: 19F primer
US-08-798-691-61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Query Match
Best Local Similarity 85.0°
Matches 17; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           (617) 451-0313
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ZIP: 02109
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy of
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     US-08-428-943-8/C
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              STATE: MA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              COUNTRY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TELEFAX:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ð
```

```
Length 20;
                                                    3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TITLE OF INVENTION: Chromosome 13-Linked Breast Cancer TITLE OF INVENTION: Susceptibility Gene NUMBER OF SEQUENCES: 124
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              E: Venable, Baetjer, Howard & Civiletti
1201 New York Avenue N.W., Suite 1001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATUR SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PATENTIN Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
FILING DATE: 29-APR-1996
CLASSIFICATION: 530
0.3%; Score 15.2; DB 1;
85.0%; Pred. No. 1.2e+02;
tive 0; Mismatches 3;
```

```
Length 20;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     APPLICANT: Weber, Barbara
APPLICANT: Weber, Barbara
TITLE OF INVENTION: Chromosome 13-Linked Breast Cancer
TITLE OF INVENTION: Susceptibility Gene
NUMBER OF SEQUENCES: 124
                                                                                                                                                                                                                                                                                                                                                                                                                     COUNTRY: USAN
ZIP: 94025
COMPUTER RADABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: ParentIn Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/974,180
FILING DATE: 19-NOV-1997
CLASSIFICATION: 435
ATTORNEY/AGENT INFORMATION:
NAME: KASIET. Kevin R.
REGISTRATION NUMBER: 32,704
REFERENCE/DOCKET NUMBER: 206
TELECOMMUNICATION INFORMATION:
TELEPHONE: (650) 473-7779
TELEPHONE: (650) 473-8654
INFORMATION FOR SEQ ID NO: 4:
SEQUENCE CHARACTERISTICS:
LENGTH: 20 base pairs
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             0.3%; Score 15.2; DB 1;
85.0%; Pred. No. 1.2e+02;
tive 0; Mismatches 3;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ; LOCATION: 1..20
; OTHER INFORMATION: /note= "primer KJC47"
US-08-974-180-4
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sequence 120, Application US/09044946; Patent No. 6033857; GENERAL INFORMATION: APPLICANT: Tavtigian, Sean V. APPLICANT: Kamb, Alexander APPLICANT: Simard, Jacques APPLICANT: Couch, Fergus APPLICANT: Rommens, Johanna APPLICANT: Weber, Barbara
3947 GGTCTTCAAGCAATGCGTGG 3966
                                                                                                                                                                                                                                                                                                                          ADDRESSEE: Geron Corporation
STREET: 230 Constitution Drive
CITY: Menlo Park
STATE: California
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        15 GCAGGAATTCGGCACGAGGG 34
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1 gcaggaaggcgccacagag 20
                         20 GGTCTTCAGGGAATGCCTGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Best Local Similarity 85.0
Matches 17; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TYPE: nucleic acid
STRANDEDNESS: single
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TOPOLOGY: linear MOLECULE TYPE: DNA FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      RESULT 133
US-09-044-946-120/c
                                                                                                                                                                                                                                                                                                                                                                                                                  COUNTRY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ò
                                        g
      ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ö
                                                                                                                                                                                                                          .
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ADDRESSEE: Woodcock Washburn Kurtz Mackiewicz & No. 5948611ris
STREET: One Liberty Place - 46th Floor
CITY: Philadelphia
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       .
                                                                                                                                                                                                                          ;
0
                                                                                                                                                                          Query Match 0.3%; Score 15.2; DB 1; Length 20; Best Local Similarity 85.0%; Pred. No. 1.2e+02; Matches 17; Conservative 0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Length 20;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                           APPLICANT: Prockop, Darwin J.
APPLICANT: Ala-Kokko, Leena
APPLICANT: Miliams, Charlene J.
APPLICANT: Ritvaniemi, Pertti
APPLICANT: Baldwin, Clinton
APPLICANT: Hadwin, Clinton
APPLICANT: Ahmad, Nilofer Nina
TITLE OF INVENTION: Methods of Detecting A Genetic
NUMBER OF SEQUENCES: 293
CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            0.3%; Score 15.2; DB 1;
15.0%; Pred. No. 1.2e+02;
ve 0; Mismatches 3;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     COMPUTER READBLE FORM:
MEDIUM TYPE: DISKETTE, 3.5 INCH
COMPUTER: IBM Compatible
OPERATING SYSTEM: Windows 3.1
SOFTWARE: WORDPERFECT 6.1
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/256,426B
FILING DATE: 03-FEB-1995
CLASSIFICATION: 435
PRIOR APPLICATION DATA:
APPLICATION NUMBER: PCT/US93/10964
FILING DATE: 12-NOV-1993
PRIOR APPLICATION NUMBER: US 07/977,284
FILING DATE: 13-NOV-1993
APPLICATION NUMBER: US 07/977,284
FILING DATE: 13.NOV-1992
ATTORNEY/AGENT INFORMATION:
NAME: MATK DELLICA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               REGISTRATION NUMBER: 33,229
REFERENCE/DOCKET NUMBER: TJU1-1082
TELECOMMUNICATION INFORMATION:
TELEPHONE: (215) 568-3400
TELEFAX: (215) 568-3439
INFORMATION FOR SEQ ID NO: 103:
SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                     Sequence 103, Application US/08256426B
Patent No. 5948611
GENERAL INFORMATION:
                           TOPOLOGY: linear
MOLECULE TYPE: other nucleic acid
DESCRIPTION: /desc = "Primer"
HYPOTHETICAL: NO
ANTI-SENSE: YES
US-08-639-501-120
                                                                                                                                                                                                                                                                   TTCT 612
                                                                                                                                                                                                                                                                                                                20 crcccrccaagriacrircr 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Best Local Similarity 85.0%;
Matches 17; Conservative
                                                                                                                                                                                                                                                                        593 CTCCCTCCCAGATCCT
      STRANDEDNESS: single
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          LENGTH: 20
TYPE: NUCLEIC ACID
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TOPOLOGY: LINEAR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   USA
                                                                                                                                                                                                                                                                                                                                                                                                         US-08-256-426B-103/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     US-08-256-426B-103
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ZIP: 19103
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   COUNTRY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Query Match
                                                                                                                                                                                                                                                                                                                                                                                  RESULT 131
                                                                                                                                                                                                                                                                          ð
```

```
Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ö
US-08-974-180-4
US-08-974-180-4
Sequence 4, Application US/08974180
Patent No. 6022194
GENERAL INFORMATION:
APPLICANT: Funk, Walter
TITLE OF INVENTION: Methods for Modulating and Identifying
TITLE OF INVENTION: Callular Senescence
NUMBER OF SEQUENCES: 36
CORRESPONDENCE ADDRESS:
ADDRESSEE: Geron Corporation
```

```
Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Query Match 0.3%; Score 15.2; DB 1; Length 20; Best Local Similarity 85.0%; Pred. No. 1.2e+02; Matches 17; Conservative 0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      US-09-016-649-8/C

Sequence 8, Application US/09016649

Sequence 8, Application US/09016649

Patent No. G068984

APPLICANT: Tedder, Thomas F.

APPLICANT: Zhou, Liang-Ji

TITLE OF INVENTION: LYMPHOCYTE ACTIVATION ANTIGENS AND TITLE OF INVENTION: LYMPHOCYTE ACTIVATION ANTIGENS AND TITLE OF INVENTION: ANTIBODIES THERETO

NUMBER OF SEQUENCES: 15

CORRESPONDENCE ADDRESS:

ADDRESSEE: ADDRESSEE: ADDRESSEE: ADDRESSEE: ADDRESSEE: ADDRESSEE: ADDRESSEE: Ten Post Office Square
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
COMPATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/016,649
                                                MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.30
                                                                                                                                                                CURRENT APPLICATION DATA:
APPLICATION DATA:
APPLICATION NUMBER: US/08/825,487A
FILING DATE: 28-MAR-1997
CLASSIFICATION: 435
FRIOR APPLICATION 1435
FRIOR APPLICATION NUMBER: PCT/US98/060002
FILING DATE: 26-MAR-1998
CLASSIFICATION NUMBER: PCT/US98/060002
FILING DATE: 26-MAR-1998
CLASSIFICATION NUMBER: 25,227
REFERENCE/DOCKET P. Halluin
REGISTRATION NUMBER: 25,227
REFERENCE/DOCKET NUMBER: 05371.0012.999
TELECOMMUNICATION INFORMATION:
TELEFAX: 650-463-8100
TELEFAX: 650-463-8400
INFORMATION FOR SEQ ID NO: 61:
SEQUENCE CHARACTERISTICS:
CHARACTERISTIC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CLASSIFICATION:
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US/08/428,943
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               FILING DATE: 25-APR-1994
RRIOR APPLICATION DATA:
APPLICATION NUMBER: US 07/870,029
FILING DATE: 17-APR-1992
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       US 08/233,005
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             4104 CTGTCATCCTTCCAGGGCTC 4123
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1 crerchtretrecrerecre 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         not relevant
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        MOLECULE TYPE: DNA (genomic)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    FILING DATE: APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          STRAIN: 19F primer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ORIGINAL SOURCE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  STRANDEDNESS:
TOPOLOGY: lin
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CITY: Boston
STATE: MA
COUNTRY: US
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Boston
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         02109
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      US-08-825-487A-61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 RESULT 135
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         쉽
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Sequence 61, Application US/08825487A

Sequence 61, Application US/08825487A

Patent No. 6048689

GENERAL INFORMATION:

APPLICANT: White, Marga B.

TITLE OF INVENTION: METHODS FOR IDENTIFYING VARIATIONS IN POLYNUCLEOTIDE SEQUENCE:
NUMBER OF SEQUENCES:
ADDRESSEE: Howrey & Simon
STREET: 1299 Pennyalvania Avenue., N.W.

CITY: Washington,
STATE: DC
CCONTRY: USA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Gapa
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Query Match 0.3%; Score 15.2; DB 1; Length 20; Best Local Similarity 85.0%; Pred. No. 1.2e+02; Matches 17; Conservative 0; Mismatches 3; Indels
STREET: 1201 New York Avenue N.W., Sulte 1001 CITY: Washington STATE: DC COUNTRY: USA 21P: 2204
                                                                                                                                                                                                                                                                                                                             MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC Compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.30
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       FILING DATE:
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/576,559
FILING DATE: 21-DEC-1995
FILING DATE: 22-DEC-1995
RICH APPLICATION NUMBER: US 08/575,359
FILING DATE: 20-DEC-1995
FILING DATE: 20-DEC-1995
ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                       CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/044,946
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             MOLECULE TYPE: other nucleic acid
DESCRIPTION: /desc = "Primer"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CLASSIFICATION:
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 08/639,501
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            593 CTCCCTCCCAGATCCTTTCT 612
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       20 Crcccrccaagrracrrrcr 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      NAME: Ihnen, Jeffrey L.
REGISTRATION NUMBER: 28,957
REFERENCE/DOCKET NUMBER: 24
TELECOMMUNICATION INFORMATION:
TELEPHONE: 202-962-4810
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      INFORMATION FOR SEQ ID NO: 120: SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      202-962-8300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  LENGTH: 20 base pairs
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TYPE: nucleic acid
STRANDEDNESS: single
                                                                                                                                                                                                                                                                                          COMPUTER READABLE FORM: MEDIUM TYPE: Floppy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        COMPUTER READABLE FORM:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     20004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        US-09-044-946-120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               US-08-825-487A-61
```

ô

```
Gaps
                                                                                                                                                                                                                                                                                                                                                                                                ö
                                                                                                                                                                                                                                                                                                                                                0.3%; Score 15.2; DB 1; Length 20; 85.0%; Pred. No. 1.2e+02; tive 0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Sequence 61, Application US/09074476;
Patent No. 613032
GENERAL INFORMATION:
APPLICANT: Murphy, Patricia D.
APPLICANT: Allen, Antonette C.
APPLICANT: Allen, Antonette C.
APPLICANT: Thurber, Christopher P.
APPLICANT: Thurber, Denise
APPLICANT: Thurber, Denise
TITLE OF INVENTION: Coding Sequences of the Human
TITLE OF INVENTION: BRCA1 Gene
NUMBER OF SEQUENCES: 72
CORRESPONDENCES: 72
CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    SEE: Howrey & Simon
: 1299 Pennsylvania Avenue N. W.
Washington
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             FILING DATE:
ATTORNEY/AGENT INFORMATION:
NAME: Albert P. Halluin
REGISTRATION NUMBER: 25,227
REFERENCE/DOCKET NUMBER: 5371.34.US01
TELECOMMUNICATION INFORMATION:
                                                                                                                                                                                      TOPOLOGY: linear
MOLECULE TYPE: other nucleic acid
DESCRIPTION: /desc = "Primer"
HYPOTHETICAL: NO
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               PRIOR APPLICATION DATA:
APPLICATION NUMBER: 09/074,453
                                                                                                                                                                                                                                                                                                                                                                                                                                                  593 CTCCCTCCCAGATCCTTTCT 612
TELECOMMUNICATION INFORMATION:
TELEPHONE: 202-962-4810
TELEPAX: 202-962-8300
INFORMATION FOR SEQ ID NO: 120:
SEQUENCE CHARACTERISTICS:
LENGTH: 20 base pairs
TYPE: nucleic acid
STRANDENESS: single
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      20 crcccrccaagriacific 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TELEFAX: 650-463-8400
INFORMATION FOR SEQ ID NO: 61:
SEQUENCE CHARACTERISTICS:
LENGTH: 20 base pairs
TYPE: nucleic acid
STRANDEDNESS: not relevant
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        DNA (genomic)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TELEPHONE: 650-463-8109
TELEFAX: 650-463-8400
                                                                                                                                                                                                                                                                                                                                                                             Best Local Similarity 85.0 Matches 17; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ZIP: 20004
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy of
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CLASSIFICATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TOPOLOGY: line
MOLECULE TYPE: I
ORIGINAL SOURCE:
                                                                                                                                                                                                                                                                                    ; ANTI-SENSE: YES
US-09-044-908-120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             USA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ADDRESSEE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 RESULT 137
US-09-074-476-61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            STREET:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             COUNTRY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          STATE:
                                                                                                                                                                                                                                                                                                                                                         Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CILK:
                                                                                                                                                                                                                                                                                                                                                                                                                                                  ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ·.
                                                                                                                                                                                                                                                                                                                                                                                                                          Query Match 0.3%; Score 15.2; DB 1; Length 20; Best Local Similarity 85.0%; Pred. No. 1.2e+02; Matches 17; Conservative 0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              APPLICANT: Tavingian, Sean V.
APPLICANT: Tavingian, Alexander
APPLICANT: Simard, Jacques
APPLICANT: Simard, Jacques
APPLICANT: Couch, Fergus
APPLICANT: Couch, Fergus
APPLICANT: Weber, Barbara
TITLE OF INVENTION: Chromosome 13-Linked Breast Cancer
TITLE OF INVENTION: Susceptibility Gene
NUMBER OF SEQUENCES: 124
CORRESPONDENCE ADDRESS:
ADDRESSEE: Venable, Baetjer, Howard & Civiletti
STREET: 1201 New York Avenue N.W., Suite 1001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PATEMIN Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/044,908
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    NAME: Ihnen, Jeffrey L.
REGISTRATION NUMBER: 28,957
REFERENCE/DOCKET NUMBER: 24884-116802-04
                          NAME: HOLIday C. Heine, Ph.D.
REGISTRATION NUMBER: 34,346
REFERENCE/DOCKET NUMBER: 34,346
REFERENCE/DOCKET NUMBER: 34,346
RELECHMUNICATION INFORMATION:
TELEPHONE: (617) 542-2290
TELEPHONE: (617) 542-2290
TELEPHONE: (617) 542-0313
INFORMATION POR SEQ ID NO: 8:
SEQUENCE CHARACTERISTICS:
LENGTH: 20 base pairs
TYPE: nucleic acid
TYPE: nucleic acid
STRANDENNESS: single
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             FILING DATE:
PRIOR APPLICATION DATE:
APPLICATION NUMBER: US 08/576,559
FILING DATE: 21-DEC-1995
FILING DATE: 22-DEC-1995
FILING DATE: 20-DEC-1995
FILING DATE: 20-DEC-1995
FILING DATE: 10-DEC-1995
APPLICATION NUMBER: US 08/573,779
FILING DATE: 18-DEC-1995
ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          3746 CATCTGATAATGGTGCTGTC 3765
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sequence 120, Application US/09044908; Patent No. 6124104; GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CLASSIFICATION:
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 08/639,501
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   20 cricidardaradicierci
                                                                                                                                                                                                                                                                                                              MOLECULE TYPE: DNA (genomic) HYPOTHETICAL: NO
                ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           COMPUTER READABLE FORM: MEDIUM TYPE: Floppy of
                                                                                                                                                                                                                                                                                           linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  USA
                                                                                                                                                                                                                                                                                                                                                            ; ANTI-SENSE: NO
US-09-016-649-8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   US-09-044-908-120/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               COUNTRY: US
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              STATE: DC
```

```
LENGTH: 20 base pair:
TYPE: nucleic acid
STRANDEDNESS: single
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   USA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ฮ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TELEFAX:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   COUNTRY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         STREET:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CITY:
STATE:
                                                                                                                                                                                                                                                                                           FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                   ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ô
                                                                                                ö
                                                                                                  Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Gaps
                                                                                                ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ö
                                                      Score 15.2; DB 1; Length 20;
Pred. No. 1.2e+02;
0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     0.3%; Score 15.2; DB 1; Length 20;
85.0%; Pred. No. 1.2e+02;
iive 0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                     TITLE OF INVENTION: COMPOUND
TITLE OF INVENTION: COMPOUND
TUTLE OF INVENTION: COMPOUND
TUTLE OF INVENTION: COMPOUND
TUTLE OF INVENTION: 185
CORRESPONDENCE: 185
ADDRESSEE: MORGAN & FINNEGAN, L.L.P.
STREET: 345 PARK AVENUE
CITY: NEW YORK
STATE: NEW YORK
COUNTRY: USA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ZIF: 10154
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version
SOFTWARE: #1.30 (EPO)
CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         APPLICATION NUMBER: US/08/765,340
PILOR DATE: 23-DEC-1996
PRIOR APPLICATION DATA:
APPLICATION NUMBER: JP 145146/94
PILOR DATE: 27-JUN-1994
PRIOR APPLICATION DATA:
APPLICATION DATA:
APPLICATION NUMBER: JP 311130/94
PILING DATE: 21-NOV-1994
ATTORNEY/AGENT INFORMATION:
NAME: SERUNIAN, LESLIE
REGISTRATION NUMBER: 35,353
REFERENCE/DOCKET NUMBER: 1452-4005
TELECOMMUNICATION INFORMATION:
TELECHONE: (212) 758-4800
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          MOLECULE TYPE: other nucleic acid
DESCRIPTION: /desc = "synthetic DNA"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   5025 AAAAAAAAAAAAAAAAAA 5044
                                                                                                                                    4104 CIGICAICCIICCAGGGCIC 4123
                                                                                                                                                                                                                                                 US-08-765-340-10
; Sequence 10, Application US/08765340
; Patent No. 6150092
; GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1 AAAAAACAAAAACAACAAA 20
                                                        Query Match
Best Local Similarity 85.0%;
Matches 17; Conservative (
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TELEFAX: (212) 751-6849
INFORMATION FOR SEQ ID NO: 1
SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        single.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             17; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            LENGTH: 20 base pairs
TYPE: nucleic acid
STRANDEDNESS: single
                                                                                                                                                                                                                                                                                                                                             APPLICANT: UCHIDA, T.
APPLICANT: TANAKA, Y.
APPLICANT: MATSUDA, Y.,
APPLICANT: KONDO, S.
; STRAIN: 19F primer
US-09-074-476-61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Best Local Similarity
Matches 17; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TELEPHONE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              US-08-765-340-10
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Query Match
                                                                                                                                    ò
                                                                                                                                                                    g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ઠે
```

```
Sequence 28, Application US/09467082
GRNERAL INFORMATION:
APPLICANT: Brett P. Monia
APPLICANT: Lex M. Coweert
CURRENT REFERENCE: RTS-0088
CURRENT APPLICATION NUMBER: US/09/467,082
CURRENT FILING DATE: 1999-12-17
NUMBER P. SEQ ID NOS: 49
SEQ ID NO 28
LENGTH: 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                APPLICANT: Shannon, Karen W.
APPLICANT: Wolber, Paul K.
APPLICANT: Wolber, Paul K.
APPLICANT: Webb. Peter G.
APPLICANT: Kincaid, Robert H.
TITLE OF INVENTION: Methods for evaluating oligonucleotide
TITLE OF INVENTION: probe sequences
NUMBER OF SEQUENCES: 1165
CORRESPONDENCE ADDRESS:
ADDRESSEE: Records Manager, Legal Department, Hewlett-Packard Company M/S 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Gapa
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ZIP: 94304
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: Compatible
COMPUTER: Patent PC-DOS/MS-DOS
SOFTWARE: Patent Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/021,701
FILING DATE: 10-FEB-1998
CLASSIFICATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                 Score 15.2; DB 1;
Pred. No. 1.2e+02;
0; Mismatches 3;
                                                                                                                                                                                                                                                                                                                                                                            ) OTHER INFORMATION: Antisense Oligonucleotide US-09-467-082-28
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            10971464-1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   US-09-021-701-549/c
; Sequence 549, Application US/09021701
; Patent No. 6251588
; GENERAL INFORMATION:
APPLICANT: Molber, Paul K.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 313 AGITCICCICCAGGACCAC 332
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ATTORNEY/AGENT INFORMATION:
NAME: Choi, Wendy A.
REGISTRATION NUMBER: 36,697
REFERENCE/DOCKET NUMBER: 1097.
TELECOMMUNICATION INFORMATION:
TELEPHONE: 650-236-2386
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 20 AGTICTCCTTCAAGGACAAC 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             : 3000 Hanover Street
Palo Alto
                                                                                                                                                                                                                                                                                                    TYPE: DNA ORGANISM: Artificial Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                            Query Match 0.3%;
Best Local Similarity 85.0%;
Matches 17; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            INFORMATION FOR SEQ ID NO:
SEQUENCE CHARACTERISTICS:
LENGTH: 20 base pairs
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      MOLECULE TYPE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ANTI-SENSE:
```

50

```
TIGIGGATCTGCATGAGTTC 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Best_Local Similarity 85.0
Matches 17; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               US-09-411-628-9/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 US-09-844-634-153
                         20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          FEATURE:
                      셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ö
                                                                                         ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Gaps
                                                                                           Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      GENERAL INFORMATION:
APPLICANT: C. Frank Bennett
APPLICANT: C. Frank Bennett
APPLICANT: Lex M. Cowsert
TITLE OF INVENTION: ANTISENSE MODULATION OF CYTOHESIN-2 EXPRESSION
FILE REPERENCE: ROS-0096
CURRENT APPLICATION NUMBER: US/09/428,583
CURRENT FILING DATE: 1999-10-27
NUMBER OF SEQ ID NOS: 89
SEQ ID NO 45
LENGTH: 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ö
                                                                                         ö
                                         0.3%; Score 15.2; DB 1; Length 20; ilarity 85.0%; Pred. No. 1.2e+02; Conservative 0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             0.3%; Score 15.2; DB 1; Length 20;
85.0%; Pred. No. 1.2e+02;
tive 0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                APPLICANT: Wellinder, Karen G.
APPLICANT: Andersen, Morten B.
TITLE OF INVENTION: Peroxidase Variants With Improved
TITLE OF INVENTION: Hydrogen Peroxidase Stability
TITLE OF INVENTION: Hydrogen Peroxidase Stability
FILE REFERENCE: 3769.214-US
CURRENT APPLICATION NUMBER: US/09/168,406A
CURRENT FILING DATE: 1994-10-01
PRIOR PHILOR DATE: 1994-11-01
PRIOR FILING DATE: 1994-11-01
PRIOR FILING DATE: 1994-11-01
PRIOR FILING DATE: 1993-06-01
PRIOR APPLICATION NUMBER: 0792/92
PRIOR APPLICATION NUMBER: 0792/92
PRIOR APPLICATION NUMBER: 0792/92
STO ID NO 28
LEMOTH: 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Query Match

0.3%; Score 15.2; DB 1;
Best Local Similarity 85.0%; Pred. No. 1.2e+02;
Matches 17; Conservative 0; Mismatches 3;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ; OTHER INFORMATION: Antisense Oligonucleotide US-09-428-583-45
                                                                                                                                                                                                                                                                  US-09-168-406A-28/c
; Sequence 28, Application US/09168406A
; Patent No. 6258769
; GENERAL INFORMATION:
                                                                                                                                    3311 AAAATAAAAACCAGTAATA 3330
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1273 AAGAGGCAATGGACATCTT 1292
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Sequence 45, Application US/09428583 Patent No. 6271029
                                                                                                                                                                             20 AAAAGAAAAATCAGTAACA 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 20 AAGAGAGCATTGGACCTCAT 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ORGANISM: Artificial Sequence FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TYPE: DNA ORGANISM: Artificial Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Query Match
Best Local Similarity 85.0
Matches 17; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 OTHER INFORMATION: Primer
                                    Query Match
Best Local Similarity
Matches 17; Conser
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   RESULT 142
US-09-428-583-45/c
  US-09-021-701-549
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            US-09-168-406A-28
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TYPE: DNA
                                                                                                                                                                           g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              셤
```

3860 TIGIGGATAIGCAICACTIC 3879

```
NS-09-844-634-153/c

| Sequence 153, Application US/09844634 |
| Sequence 153, Application US/09844634 |
| Sequence 153, Application US/09844634 |
| Sequence 153, Application G 410324 |
| Parent No. 6410324 |
| APPLICANT: C. Frank Bennett |
| APPLICANT: Andrew T. Watt |
| APPLICANT: Andrew T. Watt |
| TITLE OF INVENTION: ANTISENSE MODULATION OF TUMOR NECROSIS FACTOR RECEPTOR 2 EXPRESSIC |
| FILE REPERENCE: RTS-0216 |
| CURRENT APPLICATION NUMBER: US/09/844,634 |
| CURRENT PILING DATE: 2001-04-27 |
| SEQ ID NOS: 174 |
| LENGTH: 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Gaps
US-09-702-246-31

Sequence 31, Application US/09702246

Sequence 31, Application US/09702246

Sequence 31, Application US/09702246

GRNERAL INFORMATION:

APPLICANT: C. Frank Bennett

APPLICANT: Lex M. Coweert

TITLE OF INVENTION: ANTISENSE MODULATION OF CYTOHESIN-1 EXPRESSION

FILE REFERENCE: RTS-0195

CURRENT APPLICATION NUMBER: US/09/702,246

CURRENT PILING DATE: 2000-10-30

NUMBER OF SEQ ID NOS: 89

SEQ ID NO 31

LENGTH: 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Length 20;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Length 20;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Score 15.2; DB 1; Length 2 Pred. No. 1.2e+02; 0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       0.3%; Score 15.2; DB 1; Length 2
85.0%; Pred. No. 1.2e+02;
tive 0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Sequence 9, Application US/09411628
Patent No. 6428994
GENERAL INFORMATION:
GENERAL INFORMATION:
TITLE OF INVENTION: EDNA, GENOMIC, AND PREDICTED PROTEIN
TITLE OF INVENTION: SEQUENCES OF LEARNING-INDUCED KINASES
FILE REFERENCE: 13761-707
CURRENT APPLICATION NUMBER: US/09/411,628
CURRENT FILING DATE: 1999-10-01
                                                                                                                                                                                                                                                                                                                                                                                                                                                        ; OTHER INFORMATION: Antisense Oligonucleotide US-09-702-246-31
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       OTHER INFORMATION: Antisense Oligonucleotide
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        3193 CCTAAAGGGAGTGATCAGGA 3212
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     365 CCCTCCACCAACAGCCCATC 384
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1 cccrccaccaccccccccrc 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             20 ccraaagggrerereagga 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TYPE: DNA
ORGANISM: Artificial Sequence
                                                                                                                                                                                                                                                                                                                                                                                TYPE: DNA
ORGANISM: Artificial Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Query Match 0.3%;
Best Local Similarity 85.0%;
Matches 17; Conservative
```

51

```
NAME/KEY: primer_bind
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   32606-6669
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  MEDIUM TYPE:
                                                                                                                                                                                                                                                                                                                                       -09-198-452A-4833
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          US-09-198-452A-4833
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ADDRESSEE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    APPLICANT:
APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               APPLICANT:
APPLICANT:
APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                COUNTRY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               STREET:
                                                                                                                   Query Match
Best Local
                                                                                                                                                              Matches
                                                                                                                                                                                                           à
                                                                                                                                                                                                                                               d
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ઠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ద
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Sequence 4301, Application US/09422978

Sequence 4301, Application US/09422978

Patent No. 6537751

GENERAL INFORMATION:
APPLICANT: Cohen, Daniel

APPLICANT: Chumakov, Ilya

TITLE OF INVENTION: Blailelic markers for use in constructing a high density...
FILE REFERENCE: GENST. 020CF1

CURRENT FILING DATE: 1999-10-20

EARLIER PPLICATION NUMBER: US/09/422, 978

CURRENT FILING DATE: 1999-04-21

EARLIER PPLICATION NUMBER: US 60/109,732

EARLIER PILING DATE: 1998-11-23

EARLIER FILING DATE: 1998-11-23

EARLIER FILING DATE: 1998-04-21

NUMBER: US 60/082,614

EARLIER FILING DATE: 1998-04-21

NUMBER: US 60/082,614

EARLIER FILING DATE: 1998-04-21

NUMBER: US 60/082,614

EARLIER FILING DATE: 1998-04-21

SEQ ID NO 4301

LENGTH: 20
                                                                                                                                                                                                                                                                                                                   ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ö
                                                                                                                                                                                                                                                                                                                   Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Gaps
                                                                                                                                                                                                                                                                                                                   .
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Sequence 40, Application US/09746694

Patent No. 6451538
GENERAL INFORMATION:
APPLICANT: Lex M. COWGETT
TITLE OF INVENTION: ANTIEENSE MODULATION OF CHK2 EXPRESSION
FILE REFERENCE: RTS-0228
CURRENT APPLICATION NUMBER: US/09/746,694
CURRENT FILING DATE: 2000-12-22
NUMBER OF SEQ ID NOS: 49
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Query Match 0.3%; Score 15.2; DB 1; Length 20; Best Local Similarity 85.0%; Pred. No. 1.2e+02; Matches 17; Conservative 0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                   Length 20;
                                                                                                                                                                                                                                                                                                                3; Indels
                                                                                                                                                                                                                                                                   Query Match 0.3%; Score 15.2; DB 1; Best Local Similarity 85.0%; Pred. No. 1.2e+02; Matches 17; Conservative 0; Mismatches 3;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ; OTHER INFORMATION: Antisense Oligonucleotide US-09-746-694-40
EARLIER APPLICATION NUMBER: US 60/102,906
EARLIER FILING DATE: 1998-10-02
NUMBER OF SEQ ID NOS: 16
SOFTWARE: FastSEQ for Windows Version 4.0
SEQ ID NO 9
LENGTH: 20
                                                                                                                                                                                                  ; OTHER INFORMATION: Antisense primer US-09-411-628-9
                                                                                                                                                                                                                                                                                                                                                         2680 CAACCAATAATACAGATTGA 2699
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             3276 AACTICTICACAGGTICCAG 3295
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AACTTCTTGACAAGGTCCAG 20
                                                                                                                                                                                                                                                                                                                                                                                                  20 CAACCAAGAAGAAAGATTGA 1
                                                                                                                                                         ORGANISM: Artificial Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TYPE: DNA ORGANISM: Artificial Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TYPE: DNA
ORGANISM: Homo Sapiens
FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         -09-422-978-4301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          US-09-746-694-40
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         SEQ ID NO 40
LENGTH: 20
                                                                                                                                       TYPE: DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                               g
                                                                                                                                                                                                                                                                                                                                                         ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 g
```

```
APPLICANT: Griffals. R.
TITLE OF INVENTION: Chlamydia pneumoniae genomic sequence and polypeptides, fragments
TITLE OF INVENTION: Chlamydia pneumoniae genomic sequence and polypeptides, fragments
TITLE OF INVENTION: thereof and uses thereof, in particular for the diagnosis, prever
TITLE OF INVENTION: and treatment of infection
FILE REFERENCE: 9710-003-999
CURRENT APPLICATION NUMBER: US/09/198,452A
CURRENT FILING DATE: 1998-11-24
NUMBER OF SEQ ID NOS: 6849
SEQ ID NO 4833
                                                                                                                                                   ô
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ö
i LOCATION: 1..20
i OTHER INFORMATION: upstream amplification primer 99-14598 for SEQ 367,
US-09-422-978-4301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Gapa
                                                                                                                                                   Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    APPLICANT: Stamp, Lisa
APPLICANT: Mortill, George
APPLICANT: Finstad-Lee, Stacey
TITLE OF INVENTION: No. 6603063el Pesticidal Toxins and Nucleotide
TITLE OF INVENTION: Sequences Which Encode These Toxins
CORRESPONDENCES: 54
CORRESPONDENCE ADDRESS:
                                                                                                                                                   ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         .
0
                                                                                                    20,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Length 20;
                                                                                                                                                 IndelB
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      3; Indels
                                                                                                 Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          PatentIn Release #1.0, Version #1.30
                                                                                            Score 15.2; DB 1;
Pred. No. 1.2e+02;
0; Mismatches 3;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Query Match

0.3%; Score 15.2; DB 1;
Best Local Similarity 85.0%; Pred. No. 1.2e+02;
Matches 17; Conservative 0; Mismatches 3;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             SSEE: Saliwanchik, Lloyd & Saliwanchik 2 2421 N.W. 41st Street, Suite A-1 Gainesville
                                                                                                                                                                                                                                                                                                                                                                      Sequence 4833, Application US/09198452A Patent No. 6559294 GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Loewer, David
Dullum, Charles Joseph
Muller-Cohn, Judy
                                                                                                                                                                                                   4083 CCAGTTGCCAATTTCAAGTC 4102
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1669 GGAGAGCCTAAGGAAAATGG 1688
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       5.09-307-106-42
Sequence 42, Application US/09307106
Patent No. 6603063
                                                                                                                                                                                                                                                1 ccaerrcacaaarrcaaerc 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        GGAGAGAGAAGAAGATGG 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Feitelson, Jerald S.
Schnepf, H. Ernest
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Narva, Kenneth E.
Stockhoff, Brian A.
Schmeits, James
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        COMPUTER: IBM PC compatible OPERATING SYSTEM: PC-DOS/MS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TYPE: DNA ORGANISM: Chlamydia pneumoniae
                                                                                              tch 0.3%;
al Similarity 85.0%;
17; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   COMPUTER READABLE FORM:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          SOFTWARE:
```

```
Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TITLE OF INVENTION: CODING SEQUENCE HAPLOTYPE OF THE HUMAN BRCA1 GENE
; Sequence 9, Application US/10174794
; Patent No. 6664086
; GENERAL INCORMATION:
; APPLICANT CORMATION:
; TITLE OF INVENTION: CDMA, GENOMIC, AND PREDICTED PROTEIN
; TITLE OF INVENTION: SEQUENCES OF LEARNING-INDUCED KINASES;
FILE REPERENCE: 137461-707
; CURRENT APPLICATION NUMBER: US/10/174,794
; CURRENT FILING DATE: 1909-10-01
; PRIOR APPLICATION NUMBER: US/09/411,628
; PRIOR PILING DATE: 1999-10-01
; PRIOR FILING DATE: 1999-10-02
; NUMBER OF SEQ ID NOS: 16
; SOFTWARE: 1998-10-02
; SOFTWARE: 1998-10-02
; SOFTWARE: 1998-10-02
; SEQ ID NO 9
; SEQ ID NO 9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Length 20;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ZIP: 20004
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.30
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     REGISTRATION NUMBER: «Unknown»
REFERENCE/DOCKET NUMBER: 044921-5049-01-US
TELECOMMUNICATION INFORMATION:
TELEPHONE: 202-739-3001
INFORMATION FOR SEQ ID NO: 56:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   0.3%; Score 15.2; DB 1;
85.0%; Pred. No. 1.2e+02;
tive 0; Mismatches 3;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CORRESPONDENCE ADDRESS:
ADDRESSEE: Morgan Lewis & Bockius LLP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/10/022,819
FILING DATE: 22-Apr-2002
CLASSIFICATION: «Unknown»
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                STREET: 1111 Pennsylvania Avenue
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   PRIOR APPLICATION DATA:
APPLICATION NUMBER: 09/074,452
FILING DATE: 1998-05-06
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Sequence 56, Application US/10022819
; Sequence 56, Application US/10022819
; GENERAL INFORMATION:
; APPLICANT: ALLEN, Antonette C. P.
LAWESHOR, Tammy
; ANGELLY, Tracy S.
RABIN, Mark B.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CITY: Washington DC
STATE: District of Columbia
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        FEATURE:
; OTHER INFORMATION: Antisense primer
US-10-174-794-9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        2680 CAACCAATAATACAGATTGA 2699
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      20 CAACCAAGAAGAAGATTGA 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ATTORNEY/AGENT INFORMATION:
NAME: <Unknown>
                                                                                                                                                                                                                                                                                                                                                                                                                           TYPE: DNA
ORGANISM: Artificial Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        17; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       NUMBER OF SEQUENCES:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    COUNTRY: USA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Best Local Similarity
Matches 17; Conserval
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      US-10-022-819-56
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Sequence 177, Application US/09665615B

Sequence 177, Application US/09665615B

Patent No. 6653133

GENERAL INFORMATION:

APPLICANT: Dean, Nicholas M.

APPLICANT: Marcusson, Eric G.

APPLICANT: Watt, Jacqueline

TITLE OF INVENTION: Antisense Modulation of Fas Mediated Signaling

FILE REFERENCE: ISPH-0502

CURRENT APPLICATION NUMBER: US/09/665,615B

CURRENT PILING DATE: 1999-04-12

PRIOR APPLICATION NUMBER: US 09/290,640

PRIOR APPLICATION NUMBER: US 09/290,640

PRIOR APPLICATION NUMBER: US 09/290,640

SEQ ID NOS: 179

LENGRARE: PatentIn Ver. 2.0

LENGRAR: PatentIn Ver. 2.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ..
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Query Match 0.3%; Score 15.2; DB 1; Length 20; Best Local Similarity 85.0%; Pred. No. 1.2e+02; Matches 17; Conservative 0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Length 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           0.3%; Score 15.2; DB 1;
85.0%; Pred. No. 1.2e+02;
ative 0; Mismatches 3;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ; OTHER INFORMATION: Antisense Oligonucleotide US-09-665-615B-177
                                                                              CLASSIPICATION:
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 60/029,848
FILING DATE: 30-0CT-1996
FILING DATE: 30-0CT-1996
APPLICATION NUMBER: US 08/960,780
FILING DATE: 30-0CT-1997
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 09/073,898
FILING DATE: 0S-MAX-1998
ATTORNEY AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                       NAME: Sanders, Jay M.
REGISTRATION NUMBER: 39,355
REFERENCE/DOCKET NUMBER: MA-708C2
TELECOMMUNICATION INFORMATION:
TELEPHONE: 352-375-8100
TELEPHONE: 352-375-810
INFORMATION FOR SEQ 1D NO: 42:
SEQUENCE CHARACTERISTICS:
                                     APPLICATION NUMBER: US/09/307,106 FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    3312 AAATAAAAACCAGTAATAC 3331
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             827 TCCAGAAAGCATCAGAAAA 846
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1 AAAGAGAAAACCAGAAATAC 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1 rcccraaagcarcagaara 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ; TOPOLOGY: linear; MOLECULE TYPE: DNA (genomic) US-09-307-106-42
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ORGANISM: Artificial Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Query Match 0.3
Best Local Similarity 85.0
Matches 17; Conservative
               CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    LENGTH: 20 base pairs
TYPE: nucleic acid
STRANDEDNESS: single
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          US-09-665-615B-177
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TYPE: DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         FEATURE:
```

ઠ

SEQUENCE CHARACTERISTICS:

RESULT 151 US-10-174-794-9/c

```
Gapa
   0.3%; Score 15.2; DB 1; Length 20;
85.0%; Pred. No. 1.2e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              0.3%; Score 15.2; DB 1; Length 20;
85.0%; Pred. No. 1.2e+02;
tive 0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                SOFTWARE: Patentin Release #1.0, Version #1.30 CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/734,672A
                                                                                                                                                                                                                                                                                                                                                                                                                                              APPLICANT: Murphy, Patricia D.
Allen, Antonette C.
Alvares, Christopher P.
Critz, Brenda S.
Olson, Sheri J.
Schelter, Denise B.
Zeng, Bin
TITLE OF INVENTION: Coding Sequences of the Human
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    REGISTRATION NUMBER: 43,210
REFERENCE/DOCKET NUMBER: 44921-5055-02-US
TELECOMMUNICATION INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ADDRESSEE: Morgan Lewis & Bockius LLP
STREET: 1111 Pennsylvania Ave., N.W.
CITY: Washington
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             FILING DATE: 13-Dec-2000
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/966,436
FILING DATE: 1997-11-07
APPLICATION NUMBER: US 08/598,591
FILING DATE: 1996-02-12
ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     STRAIN: 19F primer; SEQUENCE DESCRIPTION: SEQ ID NO: 61: US-09-734-672A-61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   STATE: District of Columbia COUNTRY: USA
                                                                                                                                  2971 GCCAATATAGTGGACCAGAG 2990
                                                                                                                                                                                                                                                                                                                      S-09-734-672A-61
Sequence 61, Application US/09734672A
Patent No. 6838256
GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                4104 CIGICAICCIICCAGGGCIC 4123
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             NAME: Michael S. Tuscan
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TOPOLOGY: linear
MOLECULE TYPE: DNA (genomic)
ORIGINAL SOURCE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TELEPHONE: 202-739-3000
                                                                                                                                                                                              20 GCCAATATAGAGGTCCAGGG 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       LENGTH: 20 base pairs
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TELEFAX: 202-739-3001
INFORMATION FOR SEQ ID NO: 61:
SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        COMPUTER READABLE FORM:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 NUMBER OF SEQUENCES: 72
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CORRESPONDENCE ADDRESS:
                                                                      Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                17; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Best_Local Similarity
Matches 17; Conserva
   Query Match
Best Local Similarity
Matches 17; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             RESULT 156
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            APPLICANT: Rosanne M. Crooke
APPLICANT: Mark J. Graham
TITLE OF INVENTION: ANTISENSE MODULATION OF MICROSOMAL TRIGLYCERIDE TRANSFER PROTEIN
TITLE OF INVENTION: APPRESSION
FILE REFERENCE: ISPH-0591
CURRENT APPLICATION NUMBER: US/09/917,963
CURRENT PILING DATE: 2001-07-30
NUMBER OF SEQ ID NOS: 137
SEQ ID NO 44
LENGTH: 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           GENERAL INFORMATION:
GENERAL INFORMATION:
APPLICANT: Roder, Marion
TITLE OF INVENTION: Microsatellite Markers for Plants of the Species
TITLE OF INVENTION: Trificum Aestivum and Tribe Triticase and the Use of
TITLE OF INVENTION: Trificum Aestivum and Tribe Triticase and the Use of
TITLE OF INVENTION: Trificum Aestivum and Tribe Triticase and the Use of
TITLE OF INVENTION: Trificum Aestivum and Tribe Triticase and the Use of
TITLE OF INVENTION: Trificum Aestivum and Tribe Triticase and the Use of
TITLE OF INVENTION: Trificum Aestivum and Tribe Triticase and the Use of
TITLE OF INVENTION: Trificum Aestivum and Tribe Triticase and the Use of
TITLE OF INVENTION: Trificum Aestivum and Tribe Triticase and the Use of
THILE OF INVENTION: Trificum Aestivum and Tribe Triticase and the Use of
TITLE OF INVENTION: Trificum Aestivum and Tribe Triticase and the Use of
TITLE OF INVENTION: Trificum Aestivum and Tribe Triticase and the Use of
TITLE OF INVENTION: Trificum Aestivum and Tribe Triticase and the Use of
TITLE OF INVENTION: Trificum Aestivum and Tribe Triticase and the Use of
TITLE OF INVENTION: Trificum Aestivum and Tribe Triticase and the Use of
TITLE OF INVENTION: Trificum Aestivum and Tribe Triticase and the Use of
TITLE OF INVENTION: Trificum Aestivum and Tribe Triticase and the Use of
TITLE OF INVENTION: Trificum Aestivum and Tribe Triticase and the Use of
TITLE OF INVENTION: Trificum Aestivum and Trificum and Tri
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                           Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                           .
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Score 15.2; DB 1; Length 20;
Pred. No. 1.2e+02;
0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                     Length 20;
                                                                                                                                                                                                                                                                                                                                                                                                                                                     3; Indels
                                                                                                                                                                                                                                                                                                                                                                                     Score 15.2; DB 1;
Pred. No. 1.2e+02;
0; Mismatches 3;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ) OTHER INFORMATION: Antisense Oligonucleotide US-09-917-963-44
                                                                                                                                                                                                                  ANTI-SENSE: NO
FRAGMENT TYPE: internal
SEQUENCE DESCRIPTION: SEQ ID NO: 56:
                                                                                          TOPOLOGY: linear
MOLECULE TYPE: other nucleic acid
DESCRIPTION: /desc = "FRIMER
HYPOTHETICAL: NO
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Sequence 245, Application US/08983605A Patent No. 6720137
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    4104 CTGTCATCCTTCCAGGGCTC 4123
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            3857 GTGTTGTGGATATGCATCAC 3876
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Sequence 44, Application US/09917963
Patent No. 6767739
GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1 crerchrerrerrerere
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        20 GrerrereGercrectreac 1
LENGTH: 20 base pairs
                              TYPE: nucleic acid
STRANDEDNESS: single
                                                                                                                                                                                                                                                                                                                                                                                  ch 0.3%;
1 Similarity 85.0%;
17; Conservative C
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             0.3%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TYPE: DNA
ORGANISM: Artificial Sequence
FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ; ORGANISM: Triticum aestivum
US-08-983-605-245
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         17; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                Best Local Similarity
Matches 17; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          -09-917-963-44/c
                                                                                                                                                                                                                                                                                                                      US-10-022-819-56
                                                                                                                                                                                                                                                                                                                                                                                  Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           g
```

```
APPLICANT: Chatelain, Francois
APPLICANT: Chatelain, Viktor
Kumarev, Viktor
TITLE OF INVENTION: Process for Preparing Polynucleotides on
A Solid Support and Apparatus Permitting its
Implementation
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          .
0
                                      CURDITAL INTERIOR TYPE: Floppy disk
COMPUTER: IBM PC compatible
COMPUTER: IBM PC compatible
COPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/10/352,704
FILING DATE: 28-Jan-2003
CLASSIFICATION DATA:
APPLICATION DATA:
APPLICATION NUMBER: US/08/358,556A
FILING DATE: 14-DEC-1994
APPLICATION NUMBER: FR 9315164
FILING DATE: 16-DEC-1993
ATTORNEY/AGENT INPORMATION:
ATTORNEY/AGENT INPORMATION:
ATTORNEY/AGENT INPORMATION:
ATTORNEY/AGENT INPORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        DB 1; Length 15; 90;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/10/352,704
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CORRESPONDENCE ADDRESS:
ADDRESSE: Jacobson, Price, Holman & Stern
STREET: 400 Seventh St. N.W.
CITY: Washington D.C
STATE: D.C
COUNTRY: U.S.A.
                                                                                                                                                                                                                                                                                                                                                            ATIONALY TANGENT TO NOT THE STATE OF THE REGISTRATION NUMBER: 31,409
REGISTRATION NUMBER: 31,409
REFERENCE/DOCKET NUMBER: 10577/P58418
TELECOMMUNICATION INFORMATION:
TELEPAX: (202) 393-5350
TELEFAX: (202) 393-5350
TELEX: RCA 24853 IDEA UR
INFORMATION FOR SEQ ID NO: 10:
SEQUENCE CHARACTERISTICS:
LENGTH: 15 base pairs
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Best Local Similarity 100.0%; Pred. No. 90;
Matches 15; Conservative 0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   LOCATION: 1..15 SEQUENCE DESCRIPTION: SEQ ID NO: 10: US-10-352-704-10
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 0.3%; Score 15;
100.0%; Pred. No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Sequence 16, Application US/10352704; Patent No. 6825339
GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TYPE: nucleic acid
STRANDEDNESS: single
TOPOLOGY: linear
MOLECULE TYPE: DNA (genomic)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             5025 AAAAAAAAAAAAA 5039
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ANTI-SENSE: NO FRAGMENT TYPE: N-terminal
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      NUMBER OF SEQUENCES: 31
ZIP: 20004
COMPUTER READABLE FORM:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      15 AAAAAAAAAAAAA 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      US-10-352-704-16
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ద
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Kumarev, Viktor
TITLE OF INVENTION: Process for Preparing Polynucleotides on
a Solid Support and Apparatus Permitting its
Implementation
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             .;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Length 20;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             3; Indels
                                                                                             TITLE OF INVENTION: LYMPHOCYTE ACTIVATION ANTIGENS AND TITLE OF INVENTION: ANTIBODIES THERETO NUMBER OF SEQUENCES: 15
CADRESPONDENCE ADDRESS:
CADRESSEE: Weingarten, Schurgin, Gagnebin & Hayes
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    NUMBER OF SEQUENCES: 31
CORRESPONDENCE ADDRESS:
ADDRESSE: Jacobson, Price, Holman & Stern
STREET: 400 Seventh St. N.W.
CITY: Washington D.C
COUNTRY: U.S.A.
                                                                                                                                                                                      ADDRESSEE: Weingarten, Schurgin, Gagnebin & Hayes
STREET: Ten Post Office Square
                                                                                                                                                                                                                                                                                                                                  COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOPTWARE: Patentin Release #1.0, Version #1.25
CURRATT APPLICATION DATA:
APPLICATION NUMBER: PCT/US95/04858
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Score 15.2; DB 1;
Pred. No. 1.2e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   0.3%; Scor.
85.0%; Pred. No. 1...
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 PRIOR APPLICATION:
PRIOR APPLICATION:
APPLICATION NUMBER: US 08/233,005
FILING DATE: 25-APR-1994
PRIOR APPLICATION NUMBER: US 07/870,029
APPLICATION NUMBER: US 07/870,029
FILING DATE: 17-APR-1992
ATTORNEY/AGENT INFORMATION:
NAME: Holliday C. Heine, Ph.D.
REGISTRATION NUMBER: 34,346
REFERENCE/DOCKET NUMBER: DFC-210AQ999
TELEPHONEY: (617) 451-0313
INFORMATION FOR SEQ ID NO: 8:
SEQUENCE CHARACTERISTICS:
LENGTH: 20 base pairs
TYPE: nucleic acid
STRANDENNESS: Single
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        APPLICANT: Chatelain, Francois
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           3746 CATCTGATAATGGTGCTGTC 3765
              PCT-US95-04858-8/c; Sequence 8, Application PC/TUS9504858; GENERAL INFORMATION:
APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               US-10-352-704-10/c
Sequence 10, Application US/10352704
Patent No. 6825339
GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        20 CTTCTGATGATAGTGCTGTC 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     MOLECULE TYPE: DNA (genomic) ANTI-SRNCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Best Local Similarity 85.0
Matches 17; Conservative
                                                                                                                                                                                                                                              Boston
                                                                                                                                                                                                                                                                                           SD
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   FILING DATE:
                                                                                                                                                                                                                                                                                                               02109
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           PCT-US95-04858-8
                                                                                                                                                                                                                                                                                         COUNTRY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Query Match
```

ઠે g

```
Sequence 6255, Application US/09422978

Patent No. 653751

GENERAL INFORMATION:

APPLICANT: Chen, Daniel

APPLICANT: Chumakov, Ilya

APPLICANT: Chumakov, Ilya

APPLICANT: Chumakov, Ilya

TITLE OF INVENTION: Biallelic markers for use in constructing a high density...

FILE REFERENCE: GENSET.020CP1

CURRENT APPLICATION NUMBER: US/09/422,978

CURRENT FILING DATE: 1999-10-20

EARLIER APPLICATION NUMBER: US 60/109,732

EARLIER FILING DATE: 1998-11-23

EARLIER PILING DATE: 1998-11-23

EARLIER APPLICATION NUMBER: US 60/082,614

EARLIER PILING DATE: 1998-04-21

NUMBER OF SEQ ID NOS: 11796

SEQ ID NO 6255
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Sequence 27, Application US/09290640

Patent No. 6204055

GENERAL INFORMATION:
GAPLICANT: Dean, Wicholas M.
APPLICANT: Marcusson, Eric G.
TITLE OF INVENTION: Antisense Compound Modulation of Fas Mediated Signaling FILE REFREENCE: ISPH-0351
CURRENT APPLICATION NUMBER: US/09/290,640
CURRENT FILING DATE: 1999-04-12
NUMBER OF SEQ ID NOS: 85
SOFTWARE: Patentin Ver. 2.0
SEQ ID NO 27
ILENGTH: 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          , LOCATION: 1..19 To The Process amplification primer 99-10436 for SEQ 2321, US-09-422-978-6255
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Gapa
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Gapa
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Query Match 0.3%; Score 15; DB 1; Length 19; Best Local Similarity 100.0%; Pred. No. 1.2e+02; Matches 15; Conservative 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              0.3%; Score 15; DB 1; Length 20; 100.0%; Pred. No. 1.2e+02; tive 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ; OTHER INFORMATION: Synthetic Sequence US-09-290-640-27
1124 TCTTTGACACATCAC 1138
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    2435 GICTTAGTGATGCTG 2449
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TYPE: DNA ORGANISM: Artificial Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              43 CGTTTGCTGGGCTG 57
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Query Match
Best Local Similarity 100.
Matches 15; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TYPE: DNA
ORGANISM: Homo Sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 NAME/KEY: primer_bind
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               US-09-290-640-27/c
                                                                                                                                        US-09-422-978-6255
  ò
                                       g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ઠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  US-09-422-978-8771

US-09-422-978-8771

Sequence 8771.

Patent No. 6537751

GENERAL INFORMATION:

APPLICANT: Cohen, Daniel

APPLICANT: Chumakov, Ilya

ITLE OF INVENTION: Biallelic markers for use in constructing a high density...

FILE REFERENCE: GENERT 020CP1

CURRENT APPLICATION NUMBER: US/09/422,978

CURRENT FILING DATE: 1999-10-20

EARLIER FILING DATE: 1999-04-21

EARLIER PILING DATE: 1999-11-23

EARLIER FILING DATE: 1998-04-21

WUMBER: VISON WOMBER: US 60/109,732

EARLIER FILING DATE: 1998-04-21

WUMBER OF SQ ID NOS: 11796

SQ ID NO 8771

LENGIH: 18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      NAME/KEY: primer_bind; LOCATION: 1..18 ____; COTHER INFORMATION: downstream amplification primer 99-18109 for SEQ 906, in compleme US-09-422-978-8771
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Query Match 0.3%; Score 15; DB 1; Length 18; Best Local Similarity 100.0%; Pred. No. 1.1e+02; Matches 15; Conservative 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Length 15;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               0; Indels
                                                         PELLON DATE: 14-DEC-1994
APPLICATION NUMBER: US/08/358,556A
PILING DATE: 14-DEC-1994
APPLICATION NUMBER: FR 9315164
FILING DATE: 16-DEC-1993
ATORNEY/AGENT INFORMATION:
NAME: Player, William E.
RECITRATION NUMBER: 10577/F58418
TELEPROMUNICATION INFORMATION:
TELEPHONE: (202) 638-666
TELEFAX: (202) 393-5350
TELEFAX: (202) 393-5350
TELEX: RAA 246893 IDEA UR
INFORMATION FOR SEQ ID NO: 16:
SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Query Match 0.3%; Score 15; DB Best Local Similarity 100.0%; Pred. No. 90, Matches 15; Conservative 0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ; NAME/KEY: CDS
; LOCATION: 1..15
; SEQUENCE DESCRIPTION: SEQ ID NO: 16:
US-10-352-704-16
                                                                                                                                                                                                                                                                                                                                                                                                                               TYPE: nucleic acid
STRANDENES: single
TOPOLGY: linear
MOLECULE TYPE: DNA (genomic)
HYPOTHETICAL: NO
ANTI-SENSE: NO
FRAGMENT TYPE: N-terminal
FILING DATE: 28-Jan-2003
                                                                                                                                                                                                                                                                                                                                                                                                   LENGTH: 15 base pairs
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               5025 AAAAAAAAAAAAA 5039
                      CLASSIFICATION: 536
PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1 AAAAAAAAAAAA 15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TYPE: DNA
ORGANISM: Homo Sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    a
```

```
FEATURE: OTHER INFORMATION: primer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TYPE: DNA
ORGANISM: human
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        US-09-475-947A-340
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              US-09-618-919A-3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    SEQ ID NO 340
LENGTH: 18
                   SEQ ID NO 45
LENGTH: 18
                                                                                                                                                                                                                                                                              δ
                                                                                                                                                                                                                                                                                                                 Dp
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 US-09-665-615B-27/C

Sequence 27, Application US/09665615B

Patent No. 6653133

GENERAL INFORMATION:

APPLICANT: Dean. Nicholas M.

APPLICANT: Wyatt, Jacqueline

TITLE OF INVENTION: Antisense Modulation of Fas Mediated Signaling

FILE REFERENCE: ISPH-0502

CURRENT APPLICATION NUMBER: US/09/665,615B

CURRENT FILING DATE: 1999-04-12

PRIOR PILING DATE: 1999-04-12

NUMBER OF SEQ ID NOS: 179

SEQ ID NO 27

LENGTH: 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Sequence 45, Application US/09256496
; Patent No. 5998206
; GENERAL INFORMATION:
    APPLICANT: Lex M. Cowsert
; TITLE OF INVENTION: ANTISENSE MODULATION OF G-APLHA-12 EXPRESSION
; FILE REFERENCE: RTS-0056
; CURRENT APPLICATION NUMBER: US/09/256,496
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            .
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       .
0
                                                         GENERAL INFORMATION:
APPLICANT: Ian Popoff
APPLICANT: Ian Popoff
TITLE OF INVENTION:
FILE REFERENCE: RTS-0150
CURRENT APPLICANTION NUMBER: US/09/517,467B
CURRENT APPLICANTON NUMBER: 09/517,467
PRIOR APPLICATION NUMBER: 09/517,467
PRIOR FILING DATE: 2000-03-02
NUMBER OF SEQ ID NOS: 345
SEQ ID NO 343
LENGTH: 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Query Match 0.3%; Score 15; DB 1; Length 20; Best Local Similarity 100.0%; Pred. No. 1.2e+02; Matches 15; Conservative 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                Length 20;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                Query Match 0.3%; Score 15; DB 1; Le Best Local Similarity 100.0%; Pred. No. 1.2e+02; Matches 15; Conservative 0; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                         ; OTHER INFORMATION: Antisense Oligonucleotide US-09-517-467B-343
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               OTHER INFORMATION: Synthetic Sequence
US-09-517-467B-343
; Sequence 343, Application US/09517467B
; Patent No. 6451602
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1408 ATTGAAGATCACAGT 1422
                                                                                                                                                                                                                                                                                                                          TYPE: DNA
ORGANISM: Artificial Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TYPE: DNA
ORGANISM: Artificial Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               4 ATTGAAGATCACAGT 18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 43 CGTTTGCTGGGGCTG 57
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       17 cerrrecreecere 3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       US-09-665-615B-27
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       RESULT 164
US-09-256-496-45
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ઠે
```

```
ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ö
                                                                                                                                                                                                                                                                                                                         Gaps
                                                                                                                                                                                                                                                                                                                         .
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  0.3%; Score 14.8; DB 1; Length 18;
38.9%; Pred. No. 1.2e+02;
ive 0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                    Length 18;
                                                                                                                                                                                                                                                                                                                         2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  GENERAL INTORMATION:
GENERAL INTORMATION:
APPLICANT: Paesen, Guido Christiaan
APPLICANT: Paesen, Guido Christiaan
APPLICANT: Nuttall, Patricia Anne
TITLE OF INVENTION: Vascactive Amine Binding Molecules
FILE REFERENCE: 2369-1-001CON
FURRENT APPLICATION NUMBER: US/09/618,919A
CURRENT APPLICATION NUMBER: US 09/180,733
PRIOR FILING DATE: 1990-11-13
PRIOR APPLICATION NUMBER: GB 970784.8
PRIOR FILING DATE: 1996-05-18
PRIOR FILING DATE: 1996-05-18
PRIOR FILING DATE: 1997-04-18
NUMBER OF SEQ ID NOS: 24
SEQ ID NO 3
LENGTH: 18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   US-09-475-947A-340/c

| Sequence 340, Application US/09475947A |
| Sequence 340, Application US/09475947A |
| Sequence 340, Application US/09475947A |
| Patent No. 6472154 |
| GENERAL INFORMATION: |
| APPLICANT: Garner, Harold R. |
| APPLICANT: Wren, John D. |
| TITLE OF INVENTION: Polymorphic Repeats in Human Genes |
| TITLE OF INVENTION: Polymorphic Repeats in Human Genes |
| CURRENT APPLICATION NUMBER: US/09/475,947A |
| CURRENT FILING DATE: 1999-12-31 |
| NUMBER OF SEQ ID NOS: 346 |
| SOFTWARE: Patentin Ver. 2.1
                                                                                                                                                                                                                                                              Query Match

0.3%; Score 14.8; DB 1;
Best Local Similarity 88.9%; Pred. No. 1.2e+02;
Matches 16; Conservative 0; Mismatches 2;
                                                                                                                                                                  , OTHER INFORMATION: Antisense Oligonucleotide US-09-256-496-45
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Sequence 3, Application US/09618919A, Patent No. 6617312
                                                                                                                                                                                                                                                                                                                                                                              4463 AAGTTGTCCAGGAAATTC 4480
                                                                                                                                                                                                                                                                                                                                                                                                                                    1 AAGTTGTCCAGGAAGTAC 18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  47 TGCTGGGCTGCAGCAGC 64
CURRENT FILING DATE: 1999-02-23 NUMBER OF SEQ ID NOS: 86
                                                                                                          TYPE: DNA ORGANISM: Artificial Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TYPE: DNA ORGANISM: Artificial Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 88.98;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 18 TGCTGGGGCTGCTGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Query Match
Best Local Similarity 88.99
Matches 16; Conservative
```

```
COMPUTER: Apple Macintosh
OPERATING SYSTEM: Macintosh 6.0.5
SOFTWARE: WordPerfect
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/07/977,694
FILING DATE: 19221117
CLASSIFICATION 135
PRIOR APPLICATION DATA:
APPLICATION NUMBER:
                FILING DATE:
FILING DATE:
FILING DATE:
FILING DATE:
MAME: Keevin R. Kaster
REGISTRATION NUMBER: 32704
REPERBINGE/DOCKET NUMBER: 2598
TELECHONE: (415) 420-344
TELEPHONE: (415) 420-344
TELEPHONE: (415) 658-5239
INFORMATION FOR SEQ ID NO: 47: SEQUENCE CHARACTERISTICS:
LENGTH: 19 base, pairs
TYPE: NUCLEIC ACID
STRANBENESS: single stranded
TOPOLOGY: linear
MOLECULE TYPE: Other nucleic acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    NAME: Stacey R. Sias, Ph.D.
REGISTRATION NUMBER: 32,630
REFERENCE/DOCKET NUMBER: 8733
TELECOMMUNICATION INFORMATION:
TELEPAX: (510) 814-2863
TELEFAX: (510) 814-2977
INPORMATION FOR SEQ ID NO: 47:
SEQUENCE CHARACTERISTICS:
LENGTH: 19 base pairs
TYPE: NUCLEIC ACID
STRANDEDNESS: Single stranded
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  2820 ACGAAATGGTTCTCTTCC 2837
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                19 AGGATATGGTTCTCTTCC 2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                           US-07-696-793A-47
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           셤
                                                                                           ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ö
                                                                                             Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             US-07-696-793A-47/C

Sequence 47, Application US/07696793A

Patent No. 5220004

GENERAL INFORMATION:
APPLICANT: Saiki, Randall K.
APPLICANT: Nasarabadi, Shanavaz L.
TITLE OF INVENTION: Typing
NUMBER OF SEQUENCES: 58
CORRESPONDENCE ADDRESS:
ADDRESSEE: Cetus Corporation
STREET: 1400 Fifty-Third Street
CITY: Emeryville
STRTE: California
COUNTRY: U.S.A.
                                                                                           ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ö
                                        Query Match 0.3%; Score 14.8; DB 1; Length 18; Best Local Similarity 88.9%; Pred. No. 1.2e+02; Matches 16; Conservative 0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Length 18;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     2; Indels
                                                                                                                                                                                                                                                                                                                                    GENERAL INFORMATION:
APPLICANT: Paesen, Guido Christiaan
APPLICANT: Paesen, Guido Christiaan
APPLICANT: Nuttall, Patricia Anne
TILE GF INVENTION: Vascactive Amine Binding Molecules
FILE REFERENCE: 2369-1-001CON
CURRENT APPLICATION NUMBER: US/09/618,919A
CURRENT FILING DATE: 2000-07-18
PRIOR FILING DATE: 1998-11-13
PRIOR FILING DATE: 1998-11-13
PRIOR FILING DATE: 1996-05-18
PRIOR FILING DATE: 1996-05-18
PRIOR FILING DATE: 1996-05-18
PRIOR FILING DATE: 1997-04-18
NUMBER OF SEQ ID NOS: 24
SOUTHARE: PREUSED FOR WINDOWS VERSION 4.0
SEQ ID NO 7
LENGTH: 18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ZIP: 94608
COMPUTER READABLE FORM:
MEDIUM TYPE: Diskette, 3.50 inch, 800 Kb storage COMPUTER: Apple Macintosh
OPERATING SYSTEM: Macintosh 6.0.5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Score 14.8; DB 1;
Pred. No. 1.2e+02;
0; Mismatches 2;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               SUFFINAL:
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/07/696,793A
FILING DATE: 19910507
                                                                                                                                                                                                                                                                                         Sequence 7, Application US/09618919A
Patent No. 6617312
                                                                                                                                 15 GCAGGAATTCGGCACGAG 32
                                                                                                                                                                                 1 GCAGGAGCTCGGCACGAG 18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                15 GCAGGAATTCGGCACGAG 32
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           GCAGGAGCTCGGCACGAG 18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ORGANISM: Artificial Sequence FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Query Match
Best Local Similarity 88.9%;
Matches 16; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ) OTHER INFORMATION: primer US-09-618-919A-7
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         FILING DATE: 1 CLASSIFICATION:
US-09-618-919A-3
                                                                                                                                                                                                                                                                        US-09-618-919A-7
                                                                                                                                                                             윱
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    셤
```

```
Gapa
                                                                                                                                                                                                                                                                     US-07-694-47/C

US-07-694-47/C

Sequence 47, Application US/07977694

Patent No. 5273883

GENERAL INFORMATION:
APPLICANT: Saiki, Randall K.
APPLICANT: Saiki, Randall K.
TILLE OF INVENTION: Typing
ITILE OF INVENTION: Typing
NUMBER OF SEQUENCES: 58
CORRESPONDENCE ADDRESS:
ADDRESSER: Hoffmann-La Roche Inc.
STREET: 310 Kingsland Street
Query Match 0.3%; Score 14.8; DB 1; Length 19; Best Local Similarity 88.9%; Pred. No. 1.2e+02; Matches 16; Conservative 0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CITY: Nutley
STATE: New Jersey
STATE: New Jersey
COUNTRY: U.S.A.
ZIP: 07110-1199
COMPUTER READABLE FORM:
MEDIUM TYPE: Diskette, 3.50 inch, 800 Kb storage
```

```
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TELEX: 133521
INFORMATION FOR SEQ ID NO:
SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ORIGINAL SOURCE:
ORGANISM: Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Query Match 0.3
Best Local Similarity 88.9
Matches 16; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        LENGTH: 19 base pairs
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  single
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 COMPUTER READABLE FORM:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            nucleic acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         STRANDEDNESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        MOLECULE TYPE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          US-08-432-158-23/c
                                                                                                                                                                                                                                          07601
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TOPOLOGY:
                                                                                                                                                                                                                  COUNTRY:
ZIP: 076
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              US-08-299-187-11
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           COUNTRY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        STATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 g
                                                0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ö
                                                  Gaps
                                                  ô
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ö
                                                                                                                                                                                                                                                                                               APPLICANT: Banker, Michael J.
APPLICANT: Banker, Michael J.
APPLICANT: Banker, Malph B.
APPLICANT: Davidson, Ralph B.
APPLICANT: Derista, Dennis A.
TITLE OF INVENTION: Process for Detecting Specific mRNA and
TITLE OF INVENTION: DNA in Cells
NUMBER OF SEQUENCES: 13
CORRESPONDENCE ADDRESS:
ADDRESSE: Patent Department, Pfizer Inc
STRET: Bastern Point Road
CITY: Groton
STATE: Connecticut
    0.3%; Score 14.8; DB 1; Length 19;
88.9%; Pred. No. 1.2e+02;
iive 0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             0.3%; Score 14.8; DB 1; Length 19; 88.9%; Pred. No. 1.2e+02; tive 0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      SOFTWARE: PatentIn Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/403,555
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             FILING DATE:
CLASSIFICATION: 435
PRIOR APPLICATION: 435
PRIOR APPLICATION NUMBER: US/08/052,805
FILING DATE:
APPLICATION NUMBER: US/07/764,462
FILING DATE:
ATTORNEY/AGENT INFORMATION:
NAME: BEHGGN, Gregg C, REGISTRATION NUMBER: 30,997
REFERENCE/DOCKET NUMBER: PC8036GB
TELECOMMUNICATION INFORMATION:
TELECHHONE: (203) 441-521
TELERHONE: (203) 441-521
TELERHONE: 420440 ITT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
                                                                                                                                                                                                                    US-08-403-555-13/c
; Sequence 13, Application US/08403555
; Patent No. 5643730
; GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ; Sequence 11, Application US/08299187; Patent No. 5736325; GENERAL INFORMATION:
                                                                                          2820 ACGAAATGGTTCTTTCC 2837
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    2820 ACGAAATGGTTCTTTCC 2837
                                                                                                                                  19 AGGATATGGTTCTCTTCC 2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              19 AGGATATGGTTCTCTTCC 2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  APPLICANT: Manowitz, Paul APPLICANT: Poretz, Ronald D.
Query Match
Best Local Similarity 88.9
Matches 16, Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Query Match 0.3:
Best Local Similarity 88.9'
Matches 16; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      LENGTH: 19 base pairs
TYPE: nucleic acid
STRANDEDNESS: single
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            U.S.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ZIP: 06340
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                US-08-299-187-11
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          COUNTRY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          US-08-403-555-13
                                                                                            ò
                                                                                                                                셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ð
```

```
APPLICANT: REINFELD, MICHAEL H.
TITLE OF INVESTION: MARKER FOR INDIVIDUALS SUSCEPTIBLE TO TITLE OF INVESTION: MARKER FOR INDIVIDUALS SUSCEPTIBLE TO TITLE OF INVESTION: ALCOHOLISM CONDUCTORS AND THE CACHOLISM CONDUCTORS
```

Gapa

```
Sequence 11, Application US/08910443
Sequence 11, Application US/08910443
Sequence 11, Application US/08910443
Sequence 11, Application US/08910443
Sequence 11, Application US/0801043
Sequence 12, Ronald D. APPLICANT: Porentz, Ronald D. TITLE OF INVENTION: METHOD FOR DETECTING A PREDISPOSITION TO TITLE OF INVENTION: SUSCEPTIBILITY TO TOXIC EFFECTS OF DRUGS AND POISONS NUMBER OF SEQUENCES: 14
CORRESPONDENCE ADDRESS: ADCRESS: ADDRESSE: Klauber & Jackson STREET: Riauber & Jackson 4th Floor
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             0.3%; Score 14.8; DB 1; Length 19; 88.9%; Pred. No. 1.28+02; ive 0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                 Length 19;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       COMPUTER: Floppy disk
COMPUTER: IBM PC compatible
COMPUTER: IBM PC compatible
COMPUTER: PatentIn Release #1.0, Version #1.30
SOFTWARE: PatentIn Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/910,443
FILING DATE: 05-AUG-1997
ATTORNEY.ACTION: 435
ATTORNEY.ACTION: 435
                                                                                                                                                                                                                                                                                         Query Match

0.3%; Score 14.8; DB 1;
Best Local Similarity 88.9%; Pred. No. 1.2e+02;
Matches 16; Conservative 0; Mismatches 2;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ATTORNEY/AGENT INFORMATION:
NAME: Jackson Esq., David A.
REGISTRATION NUMBER: 26,742
REFERENCE/DOCKET NUMBER: 601-1-056 R
TELECOMMUNICATION INFORMATION:
TELEPHONE: 201-487-5800
TELEFRAX: 201-343-1684
                                                   LENGTH: 19 base pairs
TYPE: nuclet acid
STRANDEDNESS: single
TOPOLOGY: linear
MOLECULE TYPE: other nucleic acid
DESCRIPTION: /desc = "PRIMER"
HYPOTHETICAL: NO
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          MOLECULE TYPE: other nucleic acid
DESCRIPTION: /desc = "PRIMER"
                                                                                                                                                                                                                                                                                                                                                                                                   578 AGCTTGCTGGCATTGCTC 595
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     578 AGCITGCIGGCATIGCIC 595
                                                                                                                                                                                                                                                                                                                                                                                                                                                       1 AGCTTGCTGCCATTGCCC 18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TELER: 201-342
TELEX: 133521
INFORMATION FOR SEQ ID NO: 11
SEQUENCE CHARACTERISTICS:
SEQUENCE CHARACTERISTICS:
        INFORMATION FOR SEQ ID NO:
                                   SEQUENCE CHARACTERISTICS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 single
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  STREET: 411 Hackene
CITY: Hackenback
STATE: New Jersey
COUNTRY: USA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Query Match
Best Local Similarity
Matches 16; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         STRANDEDNESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            US-08-910-443-11
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               US-08-910-443-11
                                                                                                                                                                                                                                             US-08-910-443-3
                                                                                                                                                                                                                                                                                                                                                                                                      ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                    g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 APPLICANT: Poretz, Ronald D.
APPLICANT: Manowitz, Paul
TITLE OF INVENTION: METHOD FOR DETECTING A PREDISPOSITION TO
TITLE OF INVENTION: SUSCEPTIBILITY TO TOXIC EFFECTS OF DRUGS AND POISONS
NUMBER OF SEQUENCES: 14
CORRESPONDENCE ADDRESS:
ADDRESSEE: Klauber & Jackson
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Query Match . 0.3%; Score 14.8; DB 1; Length 19; Best Local Similarity 88.9%; Pred. No. 1.2e+02; Matches 16; Conservative 0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     SOFTWARE: Patentin Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/910,443
FILING DATE: 05-AUG-1997
CLASSIFICATION: 435
ATTONREY/AGENT INFORMATION:
NAME: Jackson Esq., David A.
REGISTRATION NUMBER: 26,742
REGISTRATION NUMBER: 26,742
REGISTRATION NUMBER: 601-1-056 R
TELECOMMUNICATION:
TELECOMMUNICATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 STREET: 411 Hackensack Avenue, 4th Floor CITY: Hackensack Avenue, 4th Floor STATE: New Jerser.
MEDIUM TYPE: Floppy uls.

COMBUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/NS-DOS
SOFTWARE: WordPerfect 6.0
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/432,158
FILING DATE: 30-JUN-1995
CLASSIFICATION DATA:
APPLICATION NUMBER: PCT/US93/10756
FILING DATE: 09-NOV-1993
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 07/973,332
PRIORNEY/AGENT INPORMATION:
NAME: Deluca, Mark
REGISTRATION NUMBER: 33,229
ATTORNEY/AGENT INPORMATION:
NAME: Deluca, Mark
REGISTRATION NUMBER: 33,229
REFERENCE/DOCKET NUMBER: TUU-1104
TELECOMMUNICATION INPORMATION:
TELEPHONE: (215) 568-310
TELEPHONE: (215) 568-310
TELEPHONE: (215) 568-310
TELEPHONE: (215) 568-310
TELEPHONE: 19 base pairs
LENGTH: 19 base pairs
TELEMENT: 19 base pairs
TELEMENT: 19 base pairs
TENGTH: 19 base pairs
TENGTH: 19 base pairs
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1899 TCTTGCTCTCGTCAAAGA 1916
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            US-08-910-443-3; Sequence 3, Application US/08910443; Patent No. 5935/90; GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       19 rcrrccrccrcacaca 2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         201-343-1684
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            STATE: New Jersey COUNTRY: USA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TELEX: 133521
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TOPOLOGY:
ANTI-SENSE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             US-08-432-158-23
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  셤
```

```
Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     GENERAL INFORMATION:
APPLICANT: ROGER Brent
APPLICANT: ROGER Brent
APPLICANT: Antonia S. Zervos
TITLE OF INVENTION: MAX-INTERACTING PROTEINS AND RELATED
TITLE OF INVENTION: MOLECULES AND METHODS
TITLE OF INVENTION: MOLECULES AND METHODS
TITLE OF INVENTION: MOLECULES AND METHODS
CORRESPONDENCE ADDRESS:
ADDRESSE: Fish & Richardson
STREET: 225 Franklin Street
CITY: Boston
STATE: Massachusetts
COUNTRY: U.S.A.
ZIP: O2110-2804
COMPUTER READABLE FORM:
MEDIOM TYPE: 3.5" Diskette, 1.44 Mb
COMPUTER: IBM PS/2 Model 502 or 55SX
OPERATING SYSTEM: MS-DOS (Version 5.1)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Score 14.8; DB 1; Length 19;
Pred. No. 1.2e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              2; Indels
                                                                          COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: PCT/US95/11114
FILING DATE: 30-AUG-1995
CLASSIFICATION: DATA:
APPLICATION NUMBER: US 60/
FILING DATE: 21-JUN-1995
CLASSIFICATION:
APPLICATION NUMBER: US 08/29,187
FILING DATE: 31-AUG-1994
CLASSIFICATION:
APPLICATION NUMBER: US 08/29,187
FILING DATE: 31-AUG-1994
CLASSIFICATION:
ATTORNEY/AGENT INFORMATION:
NAME: ADCKSON ERG., David A.
REGISTRATION NUMBER: 1158-1-001PCT
TELEDRAWUNICATION INFORMATION:
TELEBREACE/DOCKET NUMBER: 1158-1-001PCT
TELEBREACE. 201 487-5800
TELEBREACE. 1335-1684
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           US-08-011-398B-7; Sequence 7, Application US/08011398B; Patent No. 5512473
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       578 AGCTTGCTGGCATTGCTC 595
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1 Agerrecrecearrecec 18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   11:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              0.3%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TELEX: 133521
INFORMATION FOR SEQ ID NO:
SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Query Match 0.3
Best Local Similarity 88.9
Matches 16; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         LENGTH: 19 base pairs
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               nucleic acid
                     New Jersey
Hackensack
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               linear
                                        USA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ANTI-SENSE: NO
ORIGINAL SOURCE:
ORGANISM: Hon
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  MOLECULE TYPE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     STRANDEDNESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   PCT-US95-11114-11
                   STATE: No COUNTRY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ö
                                             Sequence 4, Application US/08876874

| Patent No. 5942405
| GENERAL INFORMATION:
| GENERAL INFORMATION:
| APPLICANT: Bergsma, Derk
| APPLICANT: Foley, James
| APPLICANT: Foley, James
| APPLICANT: Foley, James
| APPLICANT: Sarau, Henry
| TITLE OF INVENTION: THERAPEUTIC AND SCREENING
| TITLE OF INVENTION: METHODS USING C3A RECEPTOR AND C3A
| NUMBER OF SEQUENCES: 5
| CARRESPONDENCE ADDRESS:
| ADDRESSEE: RATNER & PRESTIA |
| STREET: P.O. BOX 980
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Query Match 0.1%; Score 14.8; DB 1; Length 19; Best Local Similarity 88.9%; Pred. No. 1.2e+02; Matches 16; Conservative 0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Sequence 11, Application PC/TUS9511114
GENERAL INFORMATION:
APPLICANT: Manowitz, Paul
APPLICANT: Poretz, Ronald D.
APPLICANT: Poretz, Ronald D.
APPLICANT: Park, David
APPLICANT: Ricketts, Michael H.
TITLE OF INVENTION: ALCOHOLISM
NUMBER OF ENQUENCES:
CORRESPONDENCE ADDRESS:
ADDRESSE: Alauber & Jackson
                                                                                                                                                                                                                                                                                                                                                                                                                                      ZIP: 19482
COMPUTER READABLE FORM:
MEDIUM TYPE: Diskette
COMPUTE: IBM Compatible
OPERATING SYSTEM: DOS
SOFTWARE: FastSEQ for Windows Version 2.0
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/876,874
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CLASSIFICATION: 536
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 60/019,627
FILING DATE: 16-JUN-1997
ATTORNEY/AGENT INFORMATION:
NAME: PRESTIA, PAUL F
REGISTRATION NUMBER: 23,031
REFERENCE/DOCKET NUMBER: P50501
TELEPHONE: 610-407-0700
TELEFAX: 610-407-0701
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     P50501
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  4049 GCAGTGGTACCATGGCTT 4066
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        E: Klauber & Jackson
411 Hackensack Avenue
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               GAAGTGGTACCATGGCGT 18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TELEX: 846169
INFORMATION FOR SEQ ID NO: 4:
SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             LENGTH: 19 base pairs
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TYPE: nucleic acid
STRANDEDNESS: single
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TOPOLOGY: linear MOLECULE TYPE: CDNA
                                                                                                                                                                                                                                                                                                                                                                                                                            USA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                            COUNTRY:
                                 US-08-876-874-4
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           US-08-876-874-4
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        셤
```

```
Gapa
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ö
                                                                                                                        0.3%; Score 14.4; DB 1; Length 16; 93.8%; Pred. No. 1.2e+02; tive 0; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         / Match 0.3%; Score 14.4; DB 1; Length 16; Local Similarity 93.8%; Pred. No. 1.2e+02; nes 15; Conservative 0; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                                                                                                        Sequence 7, Application US/08464051
Patent No. 5780262
GENERAL NO. 5780262
GENERAL SAPELICANT: ROGER Brent
APPLICANT: Antonis S. Zervos
TITLE OF INVENTION: MAX-INTERACTING PROTEINS AND RELATED
TITLE OF INVENTION: MAX-INTERACTING PROTEINS AND RELATED
TITLE OF INVENTION: MAX-INTERACTING PROTEINS AND RELATED
TITLE OF INVENTION: MAX-INTERACTING PROTEINS
NUMBER OF SEQUENCES: 20
CORRESPONDENCE ADDRESS:
ADDRESSEE: Fish & Richardson
STREET: 225 Franklin Street
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         COMPUTER READABLE FORM:
MEDIUM TYPE: 3.5" Diskette, 1.44 Mb
MEDIUM TYPE: 3.5" Diskette, 1.44 Mb
COMPUTER: 18W PS/2 Model 50Z or 55SX
OPERATING SYSTEM: MS-DOS (Version 5.0)
GORTWARE: Wordberfect (Version 5.0)
GURRENT APPLICATION DATA:
APPLICATION NAMER: 08/01,398
FILING DATE: 05 JUN 1995
CLASSIFICIATION 5 435
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 08/011,398
FILING DATE: 29 JAN 1993
ATTORNEY/AGENT INFORMATION:
NAME: Paul T. Clark
REGISTRATION NUMBER: 30,162
REFERENCE/DOCKET NUMBER: 30,162
RESERRENCE/DOCKET NUMBER: 30,162
TELECOMMUNICATION INFORMATION:
TELECOMMUNICATION INFORMATION:
TELEFRAX: 6617) 542-8906
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            US-08-461-859-7; Sequence 7, Application US/08461859; Patent No. 5786169
                                                                                                                                                                                                                         20 AATTCGGCACGAGGG 35
                                                                                                                                                                                                                                                          1 AATTCGCCACGAGGCG 16
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TELEX: 200154
INFORMATION FOR SEQ ID NO:
SEQUENCE CHARACTERISTICS:
                                                                                                                                                                        15, Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                STATE: Massachusetts
COUNTRY: U.S.A.
ZIP: 02110-2804
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TYPE: nucleic acid
STRANDEDNESS: single
  // TYPE: nucleic acid
// STRANDEDNESS: doub)
// TOPOLOGY: linear
US-08-370-225-7
                                                                                                                        Query Match
Best Local Similarity
Matches 15; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TOPOLOGY: linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                        US-08-464-051-7
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           US-08-464-051-7
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Query Match
Best Local &
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     RESULT 180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Matches
                                                                                                                                                                                                                                                                    g
                                                                                                                                                                                                                         ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Sequence 7, Application US/08370225
Fatent No. 5580736
GENERAL INFORMATION:
GENERAL INFORMATION:
APPLICANT: Brent, Jeno
TITLE OF INVENTION:
TITLE OF INVENTION: Interaction Trap System for Isolating
TITLE OF INVENTION: No. 5580736el Proteins
CORRESPONDENCE ADDRESS:
GORRESPONDENCE ADDRESS:
CORRESPONDENCE ADDRESS:
STREET: 225 Franklin Street
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Length 16;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Query Match 0.3%; Score 14.4; DB 1; Best Local Similarity 93.8%; Pred. No. 1.2e+02; Matches 15; Conservative 0; Mismatches 1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   STATE: Massachusetts
COUNTRY: U.S.A.
ZIP: 02110-2804
COMPUTER READABLE FORM:
MEDIUM TYPE: 3.5" Diskette, 1.44 Mb
COMPUTER: IBM PS/2 Model 50Z or 55SX
OPERATING SYSTEM: MS-DOS (Version 5.0)
SOFTWARE: WordPerfect (Version 5.1)
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/370,225
            APPLICATION NUMBER: US/08/011,398B
FILING DATE: 29 JAN 1993
CLASSIFICATION: 435
FILING APPLICATION DATA:
APPLICATION NUMBER:
FILING DATE:
ATTORNEY/AGENT INFORMATION:
NAME: PAUL T. Clark
REGISTRATION NUMBER: 30,162
REFERENCE/DOCKET NUMBER: 00786/160001
TELECOMMUNICATION INFORMATION:
TELECOMMUNICATION INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   FILING DATE:
CLASSIFICATION: 435
PION APPLICATION DATA:
PILING DATE: 10/30/92
APPLICATION NUMBER: 07/969,038
FILING DATE: 10/30/92
ATVORNEY/AGENT INFORMATION:
REGISTRATION NUMBER: 30,162
REFERENCE/DOCKET NUMBER: 00786/143001
TELECHOMUNICATION INFORMATION:
TELECHOMUNICATION INFORMATION:
TELECHOMUNICATION INFORMATION:
TELEFRAX: (617) 542-5070
                                                                                                                                                                                                                                                                                            TELEPHONE: (617) 542-5070
TELEFAX: (617) 542-8906
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            20 AATTCGGCACGAGGGG 35
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1 AATTCGGCACGAGGCG 16
                                                                                                                                                                                                                                                                                                                   TELEFAX: (617) 542-8900
TELEX: 200154
INFORMATION FOR SEQ ID NO:
SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TELEX: 200154
INFORMATION FOR SEQ ID NO:
SEQUENCE CHARACTERISTICS:
CURRENT APPLICATION DATA: APPLICATION NUMBER: US
                                                                                                                                                                                                                                                                                                                                                                                                                                             TYPE: nucleic acid
STRANDEDNESS: single
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ; TOPOLOGY: linear
US-08-011-398B-7
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CITY: Boston
STATE: Massaci
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               RESULT 178
US-08-370-225-7
```

요

```
Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Query Match 0.3%; Score 14.4; DB 1; Length 16; Best Local Similarity 93.8%; Pred. No. 1.2e+02; Matches 15; Conservative 0; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      B: STERNE, KESSLER, GOLDSTEIN & FOX P.L.L.C 1100 New York Ave, N.W., Suite 600
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CUNTRY: U.S.A.

ZIP: 2005

ZOUNTRY: U.S.A.

ZIP: 2005

COMPUTER READBLE FORM:

MEDIUM TYPE: Floppy disk

COMPUTER: IBM PC compatible

OPERATING SYSTEM: PC-DOS/MS-DOS

SOFTWARE: Patentin Release #1.0, Version #1.30

CURRENT APPLICATION DATA:

APPLICATION NUMBER: US/08/879,260

FILING DATE: 19JUN1997

CLASSIFICATION: 435

PRIOR APPLICATION DATA:

APPLICATION NUMBER: 60/020,204

FILING DATE: 20JUN1996

ATTONEY/AGENT INFORMATION:

ANAMERICATION TOTAL ANAMATION:

ANAMERICATION ANAMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         0609.4260001/JAG/SRL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Sequence 10, Application US/08879260
; Patent No. 5935851
; GENERAL INFORMATION:
; APPLICANT: Murthy, Anita E.
; TITLE OF INVENTION: TPR-Containing Genes
; NUMBER OF SEQUENCES: 11
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: STERNE, KESSLER, GOLDSTEIN & F.
; STREET: 1100 New York Ave, N.W., Suite 6
          CURRENT APPLICATION TOTALS
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/462,498
FILING DATE:
CLASSIFICATION: 435
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 08/011,398
FILING DATE: 29 JAN 1993
ATTOMNEY/AGENT INFORMATION:
NAME: PAUL T. CLARK
REGISTRATION NUMBER: 30,162
RELEPRONE: (617) 542-5070
TELEFRANCE: (617) 542-8906
TELEFRANCE: (617) 542-8906
  OPERATING SYSTEM: MS-DOS (Version 5.0)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  NAME: Ludwig, Steven R.
REGISTRATION NUMBER: 36,203
REFERENCE/DOCKET NUMBER: 0609
TELECOMMUNICATION INFORMATION:
TELEPHONE: 202-371-2600
TELEFAX: 202-371-2640
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             20 AATTCGGCACGAGGGG 35
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1 AATTCGGCACGAGGCG 16
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TELEFAX: 202-371-2540
INFORMATION FOR SEQ ID NO:
SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                    TELEX: 200154
INFORMATION FOR SEQ ID NO:
SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      LENGTH: 16 base pairs TYPE: nucleic acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TYPE: nucleic acid
STRANDEDNESS: single
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CITY: Washington
STATE: D.C.
COUNTRY: U.S.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ; TOPOLOGY: linear
US-08-462-498-7
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          US-08-879-260-10
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               RESULT 181
US-00-462-498-7

Sequence 7, Application US/08462498

Setent No. 5852169

GENERAL INFORMATION:
APPLICANT: Roger Brent
TITLE OF INVENTION: MAX-INVERACTING PROTEINS AND RELATED
TITLE OF INVENTION: MOLECULES AND METHODS
NUMBER OF SEQUENCES: 2

CORRESPONDENCE ADDRESS:
ADDRESSE: Fish & Richardson
STREET: 225 Franklin Street
CITY: Boston
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              0.3%; Score 14.4; DB 1; Length 16; 93.8%; Pred. No. 1.2e+02; tive 0; Mismatches 1; Indels
APPLICANT: Brent, Roger
APPLICANT: Gyuris, Jeno
APPLICANT: Golemis, Brica
TITLE OF INVENTION: Interaction Trap System for Isolating
TITLE OF INVENTION: No. 5786169el Proteins
NUMBER OF SEQUENCES: 35
CORRESPONDENCE ADDRESS:
ADDRESSE: Fish & Richardson P.C.
                                                                                                                                                                                                                                                                 COUNTY: U.S.A.

ZIP: 02110-2804
COUNTER READABLE FORM:
COMPUTER READABLE FORM:
COMPUTER: 15.F. Diskette, 1.44 Mb
COMPUTER: 15.F. Diskette, 1.44 Mb
COMPUTER: 15.F. Model 502 or 55SX
OPERATING SYSTEM: MS-DOS (Version 5.0)
SOFTWARE: WordPerfect (Version 5.1)
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/461,859
FILING DATE: June 5, 1995
CLASSIFICATION DATA:
APPLICATION NUMBER: 08/370,225
FILING DATE: January 9, 1995
PRIOR APPLICATION NUMBER: 07/969,038
FILING DATE: October 30, 1992
ATTORNEY/AGENT INFORMATION:
NAME: Lech, Karen F.
REGISTRATION NUMBER: 35,238
REGISTRATION NUMBER: 35,238
REGISTRATION NUMBER: 35,238
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     REFERENCE/DOCKET NUMBER: 00786/143002
TELECOMMUNICATION INFORMATION:
TELEPHONE: (617) 542-5070
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  COUNTRY: U.S.A.
ZIP: 02110-2804
COMPUTER READABLE FORM:
MEDIUM TYPE: 3.5" Diskette, 1.44 Mb
COMPUTER: IBM PS/2 Model 50Z or 55SX
                                                                                                                                     STREET: 225 Franklin Street
CITY: Boston
STATE: Maser.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   20 AATTCGGCACGAGGGG 35
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TELEPHONE: (617) 542-8906
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TELEX: 200154
INFORMATION FOR SEQ ID NO:
SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Best Local Similarity 93.8
Matches 15; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Massachusetts
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        SS: single
linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               nucleic acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TYPE: nucleic
STRANDEDNESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   US-08-461-859-7
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 STATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Query Match
```

```
1401 AAATAAATTGAAGAT 1416
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |||:||||::|||| :
1 AAAUAAAAUUGAAGUU 16
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              (617) 542-8906
                                                                          Stinchcomb, Dan
Escobedo, Jaime
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               11; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TELEX: 200154
INFORMATION FOR SEQ ID NO:
SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CITY: Boston
STATE: Massachusetts
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TYPE: nucleic acid
STRANDEDNESS: double
                                                                                                                                                                                                                                                                                                                                                                                                                                  TYPE: RNA
CORGANISM: Homo sapiens
US-09-371-772B-7023
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Query Match
Best Local Similarity
Matches 11; Conserva
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  RESULT 185
PCT-US93-10069-7
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ò
                                                                                                                                                                        ö
                                                                                                                                                                     ô
                                                                                                                    Score 14.4; DB 1; Length 16;
Pred. No. 1.2e+02;
0; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Query Match 0.3%; Score 14.4; DB 1; Length 16; Best Local Similarity 93.8%; Pred. No. 1.2e+02; Matches 15; Conservative 0; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                                                                   US-08-554-385-7

US-08-554-385-7

Sequence 7, Application US/08554385

Sequence 7, Application US/08554385

Sequence 7, Application US/08554385

Sequence 7, Application US/08554385

APPLICANT: Roger Brent
APPLICANT: Antonis S. Zervos

TITLE OF INVENTION: MAX-INVERACTING PROTEINS AND RELATED

TITLE OF INVENTION: MOLECULES AND METHODS

NUMBER OF SEQUENCES: 32

CORRESPONDENCE ADDRESS:

ADDRESSEE Fish & Richardson P.C.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       COUNTRY: U.S.A.
ZIP: 02110-2804
COMPUTER READABLE FORM:
MEDIUM TYPE: 3.5" Diskette, 1.44 Mb
COMPUTER: IBM PS/2 Model 502 or 55SX
OPERATING SYSTEM: MS-DOS (Version 5.0)
SOFTWARE: WOOTGPETFECT (Version 5.1)
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/554,385
FILING DATE: No. 6017692ember 8, 1995
CLASSIFTCATION: 435
PRICA APPLICATION NUMBER:
APPLICATION NUMBER:
ATORNEY/AGENT INFORMATION:
NAME: Karen F. Lech
REGISTRATION NUMBER: 35,238
REFERENCE/DOCKET NUMBER: 00786/252001
TELECOMMUNICATION INFORMATION:
FETEL BURNEY.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Sequence 7023, Application US/09371772B Patent No. 6566127
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ADDRESSEE: Fish & Richardson P.C.
STREET: 225 Franklin Street
                                                                                                                    Query Match
Best Local Similarity 93.8%;
Matches 15; Conservative
                                                                                                                                                                                                                    20 AATTCGGCACGAGGGG 35
                                                                                                                                                                                                                                                              1 AATTCGGCACGAGGCG 16
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         20 AATTCGGCACGAGGGG 35
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            (617) 542-5070
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TELEPHONE: (617) 542-807
TELEFAX: (617) 542-8906
TELEX: 200154
TELEX: 200154
INFORMATION FOR SEQ ID NO: 7
SEQUENCE CHARACTERISTICS:
; STRANDEDNESS: single
; TOPOLGY: linear
; MOLECULE TYPE: cDNA
US-08-872-260-10
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TYPE: nucleic acid
STRANDEDNESS: single
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           STATE: Massachusetts
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TOPOLOGY: linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               US-09-371-772B-7023
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            US-08-554-385-7
```

```
APPLICANT: Escobedo, Jaime
TITLE OF INVENTION: Method and Reagent for the Treatment of Diseases or Conditions Re]
TITLE OF INVENTION: Method and Reagent for the Treatment of Diseases or Conditions Re]
TITLE OF INVENTION: Method and Reagent for the Treatment Receptor
FILE REFERENCE: MBHB00,876-J (227/198)
CURRENT FILING DATE: 1999-08-10
PRIOR APPLICATION NUMBER: US 60/005,974
PRIOR PILING DATE: 1995-10-26
PRIOR PILING DATE: 1995-01-08
NUMBER OF SEQ ID NOS: 14225
SOFTWARE: Patentin version 3.0
SEQ ID NO 7023
LENGTH: 16
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   0.3%; Score 14.4; DB 1; Length 16; 68.8%; Pred. No. 1.2e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Sequence 7., Application PC/TUS9310069
GENERAL INFORMATION:
APPLICANT: Brent, Reger
APPLICANT: Gyris, Jeno
APPLICANT: Gloemis, Erica
TITLE OF INVENTION: Interaction Trap System for Isolating
TITLE OF INVENTION: Novel Proteins
NUMBER OF SEQUENCES:
ADDRESSEE: Fish & Richardson
STREET: 225 Franklin Street
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   COUNTRY: U.S.A.
ZIP: 02110-2804
COMPUTER READABLE FORM:
WEDIUM TYPE: 3.5" Diskette, 1.44 Mb
COMPUTER: IBM PS/2 Model 50Z or 55SX
COMPUTER: Worderster (Version 5.0)
SOFTWARE: Wordersfect (Version 5.0)
CURRENT APPLICATION DATA:
APPLICATION NUMBER: PCT/US93/10069
FILING DATE: 20-OCT-1993
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               4; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CLASSIFICATION:
PRIOR APPLICATION DATA:
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 07/969,038
FILING DATE: 10/30/92
ATTORNEY AGENT INFORMATION:
NAME: Clark, Paul T.
REGISTRATION NUMBER: 30,162
REFERENCÉ/DOCKET NUMBER: 00796/143001
TELECOMUNICATION INFORMATION:
TELECOMUNICATION INFORMATION:
```

```
|||||:: ::|:||:||
1 AAACUUCUUCUGCUCA 16
1 AAACUUCUUCUGCUCA 16
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TELEFAX: (213) 955-0440
TELEX: 67-3510
INFORMATION FOR SEQ ID NO:
SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  LENGTH: 17 base pairs
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TYPE: nucleic acid
STRANDEDNESS: single
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ,
US-08-373-124A-1635
                                                                                                                                                                                                                                                                                                                                                                                                STREET:
CITY: Lo
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  RESULT 188
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ö
                                                                                                        ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              .
0
                                                                                                        °,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Length 17;
                                                               0.3%; Score 14.4; DB 1; Length 16; 93.8%; Pred. No. 1.2e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Indels
                                                                                                                                                                                                                                                                                   GENERAL INFORMATION:

APPLICANT: Stinchcomb, Dan T.

APPLICANT: Draper, Kenneth

APPLICANT: Draper, Kenneth

APPLICANT: Draper, Kenneth

APPLICANT: Draper, Kenneth

TITLE OF INVENTION: TREATMENT OF RESTENOSIS AND

TITLE OF INVENTION: TREATMENT OF RESTENOSIS AND

TITLE OF SEQUENCES: 2627

CORRESPONDENCE ADDRESS:

ADDRESSEE: Lyon & Lyon
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Query Match
0.3%; Score 14.4; DB 1;
Best Local Similarity 56.2%; Pred. No. 1.2e+02;
Matches 9; Conservative 6; Mismatches 1;
                                                                                                           0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          COMPUTER READBLE FORM:
MEDIUM TYPE: 3.5" Diskette, 1.44 Mb
MEDIUM TYPE: storage
COMPUTER: IBM Compatible
COMPUTER: IBM Compatible
COMPUTER: BENT Compatible
COMPUTER: WAS SYSTEM: IBM P.C. DOS 5.0
SOFTWARE: WAS PECT 5.1
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/373,124A
FILING DATE: January 13, 1995
APPLICATION NUMBER: 08/122,943
APPLICATION NUMBER: 08/192,943
APPLICATION NUMBER: 07/994,132
FILING DATE: December 7, 1994
APPLICATION NUMBER: 07/987,132
FILING DATE: December 7, 1992
APPLICATION NUMBER: 07/987,132
FILING DATE: August 26, 1992
ATTORNEY/AGENT INFORMATION:
NAME: WAINLY RICHARMING:
TELECOMMUNICATION INFORMATION:
TELECOMMUNICATION INFORMATION:
TELECOMMUNICATION INFORMATION:
TELECOMMUNICATION INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ADDRESSEE: Lyon & Lyon STREET: 633 West Fifth Street STREET: Suite 4700
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TELEPHONE: (213) 489-1600
TELEFAX: (213) 955-0440
TELEX: 67-3510
INFORMATION FOR SEQ ID NO: 596:
SEQUENCE CHARACTERISTICS:
                                                                                                                                                                              1 AATTCGGCACGAGGCG 16
                                                                                                                                                  20 AATTCGGCACGAGGGG 35
                                                                                     Best_Local Similarity 93.8
Matches 15; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              17 base pairs
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TYPE: nucleic acid
STRANDEDNESS: single
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CITY: Los Angeles
STATE: California
COUNTRY: U.S.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           linear
  ; TOPOLOGY: linear
PCT-US93-10069-7
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             US-08-373-124A-596
                                                                                                                                                                                                                                                         RESULT 186
US-08-373-124A-596
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             90071
                                                                   Query Match
                                                                                                                                                      à
```

2704 AAACTTGTTCTGCTCA 2719

```
| Sequence 1.75 - 1.44-1.65, Application US/08171124A |
| Parent No. 564604 |
| Parent N
```

```
0.3%; Score 14.4; DB 1; Length 17;
56.2%; Pred. No. 1.2e+02;
Ive 6; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  APPLICANT: WAN, JASON
TITLE OF INVENTION: NOVEL BACTERIOCIN PISCICOLIN 126
NUMBER OF SEQUENCES: 8
CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                E: Nixon & Vanderhye, P.C.
1100 No. 6054163th Glebe Road, 8th Floor
                                                                                                                                                                                                          COMPUTER READBLE FORM:
MEDIUM TYPE: 3.5" Diskette, 1.44 Mb
MEDIUM TYPE: 8torage
COMPUTER: 1EM COMPATIBLE
OPERATING SYSTEM: 1EM P.C. DOS 5.0
SOFTWARE: Word Perfect 5.1
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/435,628
FILING DATE: 05-MAY-1995
CLASSIFTATION NUMBER: 08/373,124
APPLICATION NUMBER: 08/373,124
APPLICATION NUMBER: 08/245,466
FILING DATE: MAY 18, 1995
APPLICATION NUMBER: 08/192,943
FILING DATE: PEDRUARY 7, 1995
APPLICATION NUMBER: 07/987,132
FILING DATE: December 7, 1992
APPLICATION NUMBER: 07/987,132
FILING DATE: August 26, 1992
APPLICATION NUMBER: 07/987,132
FILING DATE: August 26, 1992
APPLICATION NUMBER: 37,337
REPERENUE/ACENT NUMBER: 32,327
REFERENCE/DOCKET NUMBER: 32,327
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    WETTENHALL, RICHARD E.H.
                           CORRESPONDENCE ADDRESS:
ADDRESSES: Lyon & Lyon
STREET: 633 West Fifth Street
STREET: Suite 4700
CITY: Loo Angeles
STATE: California
COUNTRY: U.S.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Sequence 2, Application US/08894483
Patent No. 6054163
GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     DAVIDSON, BARRIE E.
HILLIER, ALAN J.
HARMARK, KIM
JACK, RALPH W.
HICKEY, MALCOLM W.
COVENTRY, JOHN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            2704 AAACTTGTTCTGCTCA 2719
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TELEPHONE: (213) 469-1600
TELEFAX: (213) 955-0440
TELEX: 67-3510
INFORMATION FOR SEQ ID NO: 16:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Query Match
Best Local Similarity 56.2%;
Matches 9; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               LENGTH: 17 base pairs
TYPE: nucleic acid
            NUMBER OF SEQUENCES:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    US-08-435-628-1635
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              STRANDEDNESS:
                                                                                                                                                                                           90071
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ADDRESSEE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             APPLICANT:
APPLICANT:
APPLICANT:
APPLICANT:
APPLICANT:
APPLICANT:
APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      US-08-894-483-2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Query Match 0.3%; Score 14.4; DB 1; Length 17; Best Local Similarity 56.2%; Pred. No. 1.2e+02; Matches 9; Conservative 6; Mismatches 1; Indels
APPLICANT: Draper, Kenneth
APPLICANT: McSwiggen, James
APPLICANT: Jarvis, Thale
TITLE OF INVENTION: METHODS AND COMPOSITIONS FOR
TITLE OF INVENTION: TREATMENT OF RESTENOSIS AND
TITLE OF INVENTION: CANCER USING RIBOZYMES
CORRESPONDENCES ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     METHODS AND COMPOSITIONS FOR
TREATMENT OF RESTENOSIS AND
CANCER USING RIBOZYMES
                                                                                                                                                                                                                                                                                                                                                                                                                              COMPUTER: IBM Compatible
OPERATING SYSTEM: IBM P.C. DOS 5.0
SOFTWARE: Word Perfect 5.1
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/435,628
FILING DATE: 05-MAY-1995
CLASSIPICATION 514
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 08/373,124
                                                                                                                                                                                                                                                                                                                                   ZIP: 90071
COMPUTER READABLE FORM:
MEDIUM TYPE: 3.5" Diskette, 1.44 Mb
MEDIUM TYPE: storage
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             FILING DATE: January 13, 1995
APPLICATION NUMBER: 08/245,466
FILING DATE: May 18, 1994
APPLICATION NUMBER: 08/192,943
FILING DATE: PEDRUARY 7, 1994
APPLICATION NUMBER: 07/987,132
FILING DATE: December 7, 1994
APPLICATION NUMBER: 07/936,422
APPLICATION NUMBER: 07/936,422
FILING DATE: AUGUE 26, 1992
ATTORNEY/ACENT INFORMATION:
NAME: Warburg, Richard
REGISTRATION NUMBER: 32,327
REFERENCE/DOCKET NUMBER: 32,327
REFERENCE/DOCKET NUMBER: 209/035
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ; Sequence 1635, Application US/08435628
; Patent No. 5817796
                                                                                                                                                                                         ADDRESSEE: Lyon & Lyon
STREET: 633 West Fifth Street
STREET: Suite 4700
CITY: Los Angeles
STATE: California
COUNTRY: U.S.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            GENERAL INFORMATION:
APPLICANT: Stinchcomb, Dan T.
APPLICANT: Draper, Kenneth
APPLICANT: Draper, James
APPLICANT: Jarvis, Thale
TITLE OF INVENTION: METHODS AND
TITLE OF INVENTION: TREATMENT OF
TITLE OF INVENTION: CANCER USING
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TELEX: 67-3510
INFORMATION FOR SEQ ID NO: 596:
SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    2704 AAACTTGTTCTGCTCA 2719
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TELEPHONE: (213) 489-1600
TELEFAX: (213) 955-0440
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       LENGTH: 17 base pairs
TYPE: nucleic acid
STRANDEDNESS: single
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        RESULT 189
US-08-435-628-1635
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          US-08-435-628-596
```

```
Sequence 631, Application US/09866108A
Patent No. 6686188
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1169 GTTTTGTTGATGGTGG 1184
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              2 crerrcrrcarccrcc 17
                                                                                                                                                                                                                                                                                                                                          TYPE: DNA
CORGANISM: Homo sapiens
US-09-866-108A-630
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TYPE: DNA ORGANISM: Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             US-09-866-108A-631
                                                                                                                                                                                                                                                                                                                   LENGTH:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        US-09-866-108A-630

; Sequence 630, Application US/09866108A
; Patent No. 6686188
; Patent No. 6886188
; Patent No. 6886188
; Patent No. 6886188
; Patent No. 19986198
; Patent Application No. 19986198
; Patent Application No. 19988
; Patent Application No. 1998
; Patent Patent Date: 2001-01-30
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   .;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          0.3%; Score 14.4; DB 1; Length 17; 93.8%; Pred. No. 1.2e+02; tive 0; Mismatches 1; Indels
                                                                                             COMPUTER: TEM PETOPOY disk
COMPUTER: IBM PC compatible
COMPUTER: IBM PC compatible
COMPUTER: IBM PC compatible
COMPUTER: SYSTEM: PC-DOS/MS-DOS
SOFFWARE: Patentin Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/894,483
FILING DATE: 22-FEB-1996
CLASSIFTCATION NUMBER: AU PN1310
PRIOR APPLICATION NUMBER: AU PN1310
PLING DATE: 22-FEB-1995
ATTORNEY/AGENT INFORMATION:
NAMME: Mitchard, Leonard C.
REGISTRATION NUMBER: 29,009
REFERENCE/DOCKET NUMBER: 47-100
TELLECOMMUNICATION INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TOPOLOGY: linear
MOLECULE TYPE: other nucleic acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   desc = "Primer"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TELEX: N/A INFORMATION FOR SEQ ID NO: 2:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TELEPHONE: (703) 816-4005
TELEFAX: (703) 816-4100
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Query Match
Best Local Similarity 93.8<sup>1</sup>
Matches 15; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         LENGTH: 17 base pairs
TYPE: nucleic acid
STRANDEDNESS: single
                                                                            COMPUTER READABLE FORM: MEDIUM TYPE: Floppy
Virginia
: U.S.A.
                                                22201-4714
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ò
```

```
APPLICANT: PENN, SINGEROR APPLICANT: JY. YONGGRONG APPLICANT: PENN, SINGEROR APPLICANT: RANZEL, David K. APPLICANT: RANZEL, David K. APPLICANT: RANZEN, David R. APPLICANT: CHEN, Wensheng APPLICANT: GHEN, Wensheng APPLICANT: GHEN, Wensheng TITLE OF INVENTION: MYOSIN-LIKE GENE EXPRESSED IN HUMAN HEART AND MUSCLE TITLE OF INVENTION: MYOSIN-LIKE GENE EXPRESSED IN HUMAN HEART AND MUSCLE PLIES REPRENCE: ABOMICA-7

CURRENT FILING DATE: 2001-05-25

PRIOR APPLICATION NUMBER: US 60/207,456

PRIOR PELING DATE: 2000-10-46

PRIOR PELING DATE: 2000-10-46

PRIOR PELING DATE: 2001-01-04

PRIOR PELING DATE: 2001-01-04

PRIOR PELING DATE: 2001-01-04

PRIOR PELING DATE: 2001-01-10

PRIOR PELING DATE: 2001-01-10

PRIOR PELING DATE: 2001-01-10

PRIOR PELING DATE: 2001-01-30

PRIOR PELING DATE: 2001-01-30
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ö
PRIOR PAPLICATION NUMBER: PCT/USO1/00669
PRIOR FILING DATE: 2001-01-30
PRIOR PLILING DATE: 2001-01-30
PRIOR PILING DATE: 2001-01-30
PRIOR FILING DATE: 2001-01-30
PRIOR PLILING DATE: 2001-01-30
PRIOR PLILING DATE: 2001-01-30
PRIOR PLING DATE: 2001-01-30
PRIOR PLING DATE: 2001-01-30
Remaining Prior Application data removed - See File Wrapper or PALM.
NUMBER OF SEQ ID NOS: 15755
SOFTWARE: Acomica Sequence Listing Engine
Patent No. 6686188
PATENT OF SEQ ID NOS: 15755
PATENT OF SEQ ID NOS: 15755
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Query Match 0.3%; Score 14.4; DB 1; Length 17; Best Local Similarity 93.8%; Pred. No. 1.2e+02; Matches 15; Conservative 0; Mismatches 1; Indels
```

```
2393 GCTGGCAAAGCTCCTC 2408
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 16 gereschansereere 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TYPE: RNA
ORGANISM: Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              US-09-866-108A-6352
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              d
                                                                                                                                                                                                                                                                                                                                                                                                                                                    GENERAL INFORMATION:

APPLICANT: GI, Yizhong
APPLICANT: GI, Yizhong
APPLICANT: Harm, Sharron G.
APPLICANT: PENN, Sharron G.
APPLICANT: PENN, Sharron G.
APPLICANT: PENN, Sharron G.
APPLICANT: PENN, Sharron G.
APPLICANT: Harm, Wensheng
APPLICANT: Harmon, Mark
APPLICANT: SHARNON, Mark
APPLICANT: SHARNON, Mark
INTE OF INVENTION: NVOSIN-LIKE GENE EXPRESSED IN HUMAN HEART AND MUSCLE
INTE OF INVENTION: NVOSIN-LIKE GENE EXPRESSED IN HUMAN HEART AND MUSCLE
INTER PEPLICATION NUMBER: US 60/207,456
PRIOR PELING DATE: 2000-05-25
PRIOR APPLICATION NUMBER: GE 24263.6
PRIOR APPLICATION NUMBER: GE 24263.6
PRIOR APPLICATION NUMBER: PCT/US01/00666
PRIOR APPLICATION NUMBER: PCT/US01/00666
PRIOR PELING DATE: 2001-01-30
PRIOR PELING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ö
                                                                                  Gaps
                                                                                  ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ö
0.3%; Score 14.4; DB 1; Length 17; llarity 93.8%; Pred. No. 1.2e+02; Conservative 0; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               0.3%; Score 14.4; DB 1; Length 17; 93.8%; Pred. No. 1.2e+02; tive 0; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        SOFTWARE: Acomica Sequence Listing Engine
Patent No. 6686188
SEQ ID NO 6351
                                                                                                                                                                                                                                                                                                                                                              3-09-866-108A-6351/c
Sequence 6351, Application US/09866108A
Patent No. 6686188
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              3-09-866-108A-6352/c
Sequence 6352, Application US/09866108A
Patent No. 6686188
                                                                                                                                                 1169 GTTTTGTTGATGGTGG 1184
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             2393 GCTGGCAAAGCTCCTC 2408
                                                                                                                                                                                                                    1 crerrerrearecree 16
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    GCTGGCAAAGGTCCTC 2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        APPLICANT: GU, Yizhong
APPLICANT: JI, Yonggang
APPLICANT: PENN, Sharron G.
APPLICANT: HANZEL, David K.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Query Match
Best Local Similarity 93.8
Matches 15; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TYPE: DNA
ORGANISM: Homo sapiens
US-09-866-108A-6351
                                         Local Similarity
nes 15; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 GENERAL INFORMATION:
           Query Match
                                            Best Loc
Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ઠે
```

```
APPLICANT: RANCO, Pam
APPLICANT: McSwiggen, Jim
APPLICANT: McSwiggen, Jim
APPLICANT: McSwiggen, Jim
APPLICANT: Stinchcomb, Dan
APPLICANTON: NUMBER: US/09/685,64B
CURRENT APPLICATION NUMBER: US/09/685,64B
CURRENT FILING DATE: 1995-10-26
PRIOR FILING DATE: 1995-00-10
PRIOR APPLICATION NUMBER: US/09/71,772
PRIOR APPLICATION NUMBER: US/09/71,772
PRIOR PILING DATE: 1999-08-10
PRIOR FILING DATE: 1999-08-10
SOFTWARE: Patentin version 3.0
SEQ ID NO 1072
TENGTH: 17
APPLICANT: CHEN, Wenshend
APPLICANT: CHEN, Wenshend
APPLICANT: CHEN, Wenshend
TITLE OF INVENTION: MACK
FILE REFERENCE: SCHANCA,
CURRENT APPLICATION NUMBER: US/09/866,108A
CURRENT PLILING DATE: 2001-05-26
FRIOR PLICATION NUMBER: US 60/207,456
FRIOR PLILING DATE: 2000-010-04
FRIOR PLILING DATE: 2000-010-04
FRIOR APPLICATION NUMBER: GB 24263.6
FRIOR APPLICATION NUMBER: PCT/US01/00666
FRIOR APPLICATION NUMBER: PCT/US01/00666
FRIOR APPLICATION NUMBER: PCT/US01/00667
FRIOR PLILING DATE: 2001-01-30
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Length 17;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Query Match
0.3%; Score 14.4; DB 1;
Best Local Similarity 93.8%; Pred. No. 1.2e+02;
Matches 15; Conservative 0; Mismatches 1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       APPLICANT: Ribozyme Pharmaceuticals, Inc.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        S-09-685-664B-1072/c
Sequence 1072, Application US/09685664B
Patent No. 6818447
GENERAL INFORMATION:
```

```
% Sequence 32, Application US/09205144

; Sequence 32, Application US/09205144

; Patent No. 59587101
; General Information;
; APPLICANT: C. Frank Bennett
; APPLICANT: Lax M. Cowsert
; APPLICANT: Lax M. Cowsert
; TITLE OF INVENTION: ANTISENSE MODULATION OF CELLULAR INHIBITOR OF APOPTOSIS-2 EXPRESS)
; FILE REFERENCE: RTG-0021
; CURRENT PAPLICATION NUMBER: US/09/205,144
; CURRENT FILIG DATE: 1998-12-03
; NUMBER OF SEQ ID NOS: 47
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    0.3%; Score 14.4; DB 1; Length 18; 93.8%; Pred. No. 1.3e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Length 18;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       US-09-161-244-28
Sequence 28, Application US/09161244
Fatent No. 6004814
GENERAL INFORMATION:
APPLICANT: Bennett, C. Frank
APPLICANT: COWSER, LEX M.
TITLE OP INVENTION ANTISENSE MODULATION OF CD71 EXPRESSION
FILE REPERENCE: RTS-0007
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Query Match

0.3%; Score 14.4; DB 1;
Best Local Similarity 93.8%; Pred. No. 1.3e+02;
Matches 15; Conservative 0; Mismatches 1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ; OTHER INFORMATION: Antisense Oligonucleotide
US-09-205-144-32
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              0; Mismatches
SOFTWATING SYSTEM: IBM P.C. DOS 5.0
SOFTWARE: FastSED Version 1.5
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/585,684B
FILING DATE: January 16, 1996
PRIOR APPLICATION DATA:
APPLICATION DATA:
APPLICATION DATA:
APPLICATION NUMBER: 60/000,951
FILING DATE: July 7, 1995
ATTORNEY/AGENT INFORMATION:
NAME: Warburg, Richard
REGISTRATION NUMBER: 32,327
REFERENCE/DOCKET NUMBER: 218/078
TELECOMMUNICATION INFORMATION:
TELECOMMUNICATION INFORMATION:
TELECOMMUNICATION INFORMATION:
TELETAX: 67-3510
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CURRENT APPLICATION NUMBER: US/09/161,244
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      4554 TGACATCATCACTGAT 4569
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        841 GAAAAAGCATCTGAGA 856
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TYPE: DNA
ORGANISM: Artificial Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               18 GAAACAGCATCTGAGA 3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Best_Local Similarity 93.8
Matches 15; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
US-08-585-684B-2626
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     SEQ ID NO 32
LENGTH: 18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  RESULT 199
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ઠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     d
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ò
                                                                                                                                                                                                                                                                                                                                                                                                        Sequence 1078, Application US/0968564B

Patent No. 681847

GENERAL INFORMATION:

APPLICANT: Pavco, Pam

APPLICANT: Pavco, Pam

APPLICANT: Stinchcomb, Dan

TITLE OF INVENTION: Levels of Vascular Endothelial Growth Factor Recptor

TITLE OF INVENTION: Levels of Vascular Endothelial Growth Factor Recptor

TITLE OF INVENTION: Levels of Vascular Endothelial Growth Factor Recptor

CURRENT FILING DATE: 1995-10-26

PRIOR FILING DATE: 1995-01-08

PRIOR PLING DATE: 1996-01-08

PRIOR PLING DATE: 1996-01-08

PRIOR FILING DATE: 1999-08-10

PRIOR FILING DATE: 1999-08-10

PRIOR FILING DATE: 1999-08-10

PRIOR FILING DATE: 1999-08-10

SEQ ID NOS: 8231

SEQ ID NO 1078

LEMERT PLANCE DATE: PATENTION VARIENCE DATE

PRIOR FILING DATE: 1999-08-10

SEQ ID NO 1078
                                                                                                                                                                 ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ;
0
                                                                                                                                                                 Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Gaps
                                                                                                                                                                 .;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                .
0
                                                                                                 0.3%; Score 14.4; DB 1; Length 17; 93.8%; Pred. No. 1.2e+02; tive 0; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Query Match 0.3%; Score 14.4; DB 1; Length 17; Best Local Similarity 93.8%; Pred. No. 1.2e+02; Matches 15; Conservative 0; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      APPLICANT: Stinchcomb, Daniel T.
APPLICANT: Stinchcomb, Daniel T.
APPLICANT: Jarvis, Thale
APPLICANT: McSwiggen, James
APPLICANT: McSwiggen, James
TITLE OF INVENTION: INDUCTION OF GRAFT TOLERANCE
TITLE OF INVENTION: INDUCTION OF GRAFT TOLERANCE
TITLE OF INVENTION: AND REVERSAL OF IMMUNE RESPONSES
NUMBER OF SEQUENCES: 2751
CORRESPONDENCE ADDRESS:
ADDRESSEE: Lyon & Lyon
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                COMPUTER READABLE FORM:
MEDIUM TYPE: 3.5" Diskette, 1.44 Mb
MEDIUM TYPE: storage
COMPUTER: IBM Compatible
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      US-08-585-684B-2626/c; Sequence 2626, Application US/08585684B; Patent No. 5877021; GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ADDRESSEE: Lyon & Lyon
STREET: 633 West Fifth Street
STREET: Suite 4700
                                                                                                                                                                                                                     5051 AAAAAAAAAAAAACT 5066
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    5022 TGTAAAAAAAAAA 5037
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           16 TGGAAAAAAAAAAA 1
                                                                                                                                                                                                                                                         17 AAAAAAAAAAAAGT
                                                                                                                                                              Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ; ORGANISM: Homo sapiens
US-09-685-664B-1078
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Los Angeles
California
                                                                                                                               Local Similarity
nes 15; Conser
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   U.S.A.
                                                                                                                                                                                                                                                                                                                                                                                            US-09-685-664B-1078/c
                                             US-09-685-664B-1072
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             COUNTRY:
                                                                                                    Query Match
                                                                                                                                                           Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   RESULT 197
```

ઠ

ઠ 셤

```
APPLICANT: BETEKSEN, CAROLIN
APPLICANT: BETEKSEN, CAROLIN
APPLICANT: BETEKSEN, RICHARD C.
APPLICANT: NELSON, RICHARD C.
APPLICANT: OF UT, JIRI
TITLE OF INVENTION: ISOLATES AND FOR DIAGNOSIS OF CRYPTOSPORIDIUM
TITLE OF INVENTION: INPECTIONS
TITLE OF INVENTION: INPECTIONS
TITLE OF INVENTION: INPECTIONS
TITLE DEPERENCE: 400.19-5
CURRENT APPLICATION NUMBER: US/09/588,995A
CURRENT PILING DATE: 1997-03-27
PRIOR APPLICATION NUMBER: 08/827,171
PRIOR APPLICATION NUMBER: 08/827,171
PRIOR APPLICATION NUMBER: 08/827,171
PRIOR PILING DATE: 1997-09-12
PRIOR PILING DATE: 1995-04-13
PRIOR FILING DATE: 1995-04-03
NUMBER OF SEQ ID NOS: 115
SEQ ID NO 3: 115
LENGTH: 18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ) OTHER INFORMATION: Description of Artificial Sequence: Sense primer; OTHER INFORMATION: for cloning of 5'-adjacent region of MVK gene US-09-306-595C-30
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          , OTHER INFORMATION: Description of Artificial Sequence: Primer US-09-588-995A-31
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        0.3%; Score 14.4; DB 1; Length 18; 93.8%; Pred. No. 1.3e+02; tive 0; Mismatches 1; IndelB
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Score 14.4; DB 1;
Pred. No. 1.3e+02;
0; Mismatches 1;
                                                                                                                                                              APPLICANT: HOSHINO, Tatsuo
APPLICANT: HOSHINO, Tatsuo
APPLICANT: HOSHINO, Tatsuo
APPLICANT: HOSHINO, Tatsuo
APPLICANT: SETOGUCHI, Yutaka
TAPLICANT: SETOGUCHI, Yutaka
TAPLICANT: SETOGUCHI, Yutaka
TAPLICANT: SETOGUCHI, Yutaka
TAPLICANT: SETOGUCHI, Yutaka
TILE OF INVENTION: ISOPRENOID PRODUCTION
CURRENT PLING DATE: 1999-05-06
PRIOR APPLICATION NUMBER: 98108210
PRIOR FILING DATE: 1998-05-06
NUMBER OF SEQ ID NOS: 43
SOFTWARE: PATENTIN Ver. 2.1
                                                                                                US-09-306-595C-30
; Sequence 30, Application US/09306595C
; Patent No. 6284506
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sequence 31, Application US/09588995A
Patent No. 6514697
GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           2910 GGAAGAGGAAGACAAA 2925
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           0.3%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TYPE: DNA
ORGANISM: Artificial Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TYPE: DNA
ORGANISM: Artificial Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1 GGAAGAGGAAGAAA 16
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               APPLICANT: PETERSEN, CAROLYN
     18 GAAACAGCATCTGAGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          15; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Query Match 0.3
Best Local Similarity 93.8
Matches 15; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   RESULT 202
US-09-588-995A-31
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           SEQ ID NO 30
LENGTH: 18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             a
                                                                                                                                                                                                                                                                                                     ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ö
                                                                                                                                                                                                                                                                                                     Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Gaps
                                                                                                                                                                                                                                                                                                     .;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ö
                                                                                                                                                                                                                                                 Query Match 0.3%; Score 14.4; DB 1; Length 18; Best Local Similarity 93.8%; Pred. No. 1.3e+02; Matches 15; Conservative 0; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 IndelB
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         GENERAL INFORMATION:
APPLICANT: Stinchcomb, Daniel T.
APPLICANT: Stinchcomb, Daniel T.
APPLICANT: Jarvis, Thale
APPLICANT: McSwiggen, James
TITLE OF INVENTION: METHOD AND REAGENT FOR THE
TITLE OF INVENTION: INDUCTION OF GRAFT TOLERANCE
TITLE OF INVENTION: AND REVERSAL OF IMMUNE RESPONSES
NUMBER OF SEQUENCES: 2751
CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Query Match

0.3%; Score 14.4; DB 1;
Best Local Similarity 93.8%; Pred. No. 1.3e+02;
Matches 15; Conservative 0; Mismatches 1;
                                                                                                                                                                           ; OTHER INFORMATION: Antisense Oligonucleotide US-09-161-244-28
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            COMPUTER READABLE FORM:
MEDIUM TYPE: 3.5" Diskette, 1.44 Mb
MEDIUM TYPE: storage
COMPUTER: IBM Compatible
OPERATING SYSTEM: IBM P.C. DOS 5.0
SOFTWARE: FastSEQ Version 1.5
CURRENT APPLICATION DATA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     FILING DATE:
ATTORNEY/AGENT INFORMATION:
NAME: Warburg, Richard
REGISTRATION NUMBER: 32,327
REFERENCE/DOCKET NUMBER: 218/078
TELECOMMUNICATION INFORMATION:
TELEPHONE: (213) 955-0440
TELEFAX: (213) 955-0440
TELEFAX: (213) 955-0440
TELEFAX: (7-3510
INFORMATION FOR SEQ ID NO: 2626:
SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             APPLICATION NUMBER: US/09/038,073
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Sequence 2626, Application US/09038073 Patent No. 6194150
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       FILING DATE:
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 08/585,684
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ADDRESSEE: Lyon & Lyon
STREET: 633 West Fifth Street
STREET: Suite 4700
                                                                                                                                                                                                                                                                                                                                                    3758 GTGCTGTCCAGCTTCT 3773
CURRENT FILING DATE: 1998-09-25
NUMBER OF SEQ ID NOS: 91
SEQ ID NO 28
LENGTH: 18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  841 GAAAAAGCATCTGAGA 856
                                                                                                  TYPE: DNA ORGANISM: Artificial Sequence FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                Greererccaerrici 18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           LENGTH: 18 base pairs
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TYPE: nucleic acid
STRANDEDNESS: single
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CITY: Los Angeles
STATE: California
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  , TOPOLOGY: linear
US-09-038-073-2626
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     U.S.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   -09-038-073-2626/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ADDRESSEE:
```

ö

Сарв

ö

Gapa

ö

Length 18; 1; Indels

δ g

```
Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ó
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Length 19;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          US-08-434-099A-22/c

Sequence 22, Application US/08434099A

Patent No. 6083902

GENERAL INFORMATION:
TITLE OF INVENTION: Recombinant Fibrin Chains,
TITLE OF INVENTION: Fibrin and Fibrin-Homologs
NUMBER OF SEQUENCES: 37

CORRESPONDENCE ADDRESS:
ADDRESSEE: E.R. Squibb & Sons, Inc.
STREET: 100 Headquarters Park Drive
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PATENTIN Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/671,978A
FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Query Match

0.3%; Score 14.4; DB 1;
Best Local Similarity 93.8%; Pred. No. 1.4e+02;
Matches 15; Conservative 0; Mismatches 1;
                                                                                                                                                                                                                                                                                                                                                                                     SSEE: CALFEE, HALTER & GRISWOLD
: 800 SUPERIOR AVENUE, SUITE 1400
CLEVELAND
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CLASSIFICATION: 536
ATTORNEY/AGENT INFORMATION:
NAME: GOLRICK, MARY E
REGISTRATION NUMBER: 34,829
REFERENCE/DOCKET NUMBER: 22727/00133
TELECOMMUNICATION INFORMATION:
TELEPHONE: (216) 241-0816
INFORMATION FOR SEQ ID NO: 43:
SEQUENCE CHARACTERISTICS:
LENGTH: 19 base pairs
                                                                                                                                                                                                                APPLICANT: Saif, Linda J.
APPLICANT: Parwani, Anil
APPLICANT: Kim, Wonyong
APPLICANT: Chang, Keong-OK
TITLE OF INVENTION: ROTAVIRUS GENES
NUMBER OP SEQUENCES: 50
                                                                                                                                   US-08-671-978A-43/c
; Sequence 43, Application US/08671978A
; Patent No. 5959093
; GENERAL INFORMATION:
APPLICANT: Salf, Linda J.
; APPLICANT: Parwani, Anil
2910 GGAAGAGGAAGACAAA 2925
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         4663 AATTTTAATAGTTATA 4678
                                           1 GGAAGAAGAAAA 16
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        18 AATTTTAATACTTATA 3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TYPE: nucleic acid
STRANDEDNESS: single
                                                                                                                                                                                                                                                                                                                                                                    CORRESPONDENCE ADDRESS:
ADDRESSEE: CALFEE, H
STREET: 800 SUPERIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ZIP: 44114
COMPUTER READABLE FORM:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         MOLECULE TYPE: CDNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Skillman
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            STATE: NJ
COUNTRY: USI
ZIP: 08558
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TOPOLOGY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           COUNTRY:
                                                                                                                                                                                                                                                                                                                                                                                                                                             CITY: C
                                                                                                                  RESULT 205
  ò
                                 d
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  셤
                                                                                                                                                 NS.OUL. 2018-5652

NG.69-422-978

Sequence 5652, Application US/09422978

Sequence 5652, Application US/09422978

Sequence 5652, Application US/09422978

Sequence 5652, Application US/09422978

APPLICANT: Cohen, Daniel

APPLICANT: Blumenfeld, Marta

APPLICANT: Chumakov, 11ya

TITLE OF INVENTION: Biallelic markers for use in constructing a high density...

FILE REPERENCE: 1099-10-20

CURRENT APPLICATION NUMBER: US/09/422, 978

CURRENT FILING DATE: 1999-10-20

EARLIER APPLICATION NUMBER: US 60/109, 732

EARLIER FILING DATE: 1998-04-21

SERLIER PILING DATE: 1998-04-21

NUMBER OF SEQ ID NOS: 11796

SEQ ID NO 5652
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ; LOCATION: 1..18 -
; OTHER INFORMATION: upstream amplification primer 99-5875 for SEQ 1718,
US-09-422-978-5652
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CTHER INFORMATION: Description of Artificial Sequence: Sense primer; OTHER INFORMATION: for cloning of 5'-adjacent region of MVK gene US-09-925-388-30
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      0.3%; Score 14.4; DB 1; Length 18; 93.8%; Pred. No. 1.3e+02; Ative 0; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Query Match 0.3%; Score 14.4; DB 1; Length 18; Best Local Similarity 93.8%; Pred. No. 1.3e+02; Matches 15; Conservative 0; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Sequence 30, Application US/09925388
Patent No. 6586202
GENERAL INFORMATION:
APPLICANT: HOSHINO, Tateuo
APPLICANT: OJIMA, Kazuyuki
APPLICANT: SETOGUCHI, Yutaka
ITILE OF INVENTION: ISOPRENOID PRODUCTION
FILE REPERBNCE: ISOPRENOID PRODUCTION
CURRENT APPLICATION NUMBER: US/09/925, 388
CURRENT FILING DATE: 2001-08-09
PRIOR APPLICATION NUMBER: 09/306, 595
PRIOR FILING DATE: 1999-05-06
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 3449 CTAAGCAGATGATGGA 3464
                     2098 CCCAATAATGAAGAAA 2113
                                                                 1 CCCAATAATGAAGACA 16
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            2 caaagcagargarga 17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TYPE: DNA ORGANISM: Artificial Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              NUMBER OF SEQ ID NOS: 43
SOFTWARE: Patentin Ver. 2.1
SEQ ID NO 30
LENGTH: 18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Query Match 0.3
Best Local Similarity 93.8
Matches 15; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ORGANISM: Homo Sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  NAME/KEY: primer_bind
LOCATION: 1..18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      US-09-925-388-30
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TYPE: DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      FEATURE:
```

Š

```
APPLICANT: Cohen, Daniel
APPLICANT: Cohen, Daniel
APPLICANT: Cohen, Daniel
APPLICANT: Chumenfeld, Marta
APPLICANT: Chumenfeld, Marta
APPLICANT: Chumenkov, Ilya
TITLE OF INCENTATION. UNMER: US/09/422,978
CURRENT APPLICATION NUMBER: US/09/422,978
CURRENT FILING DATE: 1999-04-21
EARLIER APPLICATION NUMBER: US 60/109,732
EARLIER APPLICATION NUMBER: US 60/109,732
EARLIER APPLICATION NUMBER: US 60/109,732
EARLIER PILING DATE: 1998-11-23
EARLIER FILING DATE: 1998-04-21
NUMBER OF SO ID NOS: 11796
SEQ ID NO 7136
                                       Sequence 53, Application US/09261115

Sequence 53, Application US/09261115

Patent No. 6458584

GENERAL INFORMATION:

APPLICANT: MIZABEKOV, ANDREI

APPLICANT: SHIK, VALENTINE

APPLICANT: SHIK, VALENTINE

APPLICANT: FOTIN, ALEXBEI

APPLICANT: YERSHOV, GENNADIY

APPLICANT: YERSHOV, GENNADIY

TITLE OF INVENTION: WULTIPE GENETIC INFORMATION TO SIMPLE PATTERNS, ARE

TITLE OF INVENTION: PORTABLE AND REUSABLE

TITLE OF INVENTION: PORTABLE AND REUSABLE

TITLE OF INVENTION: PORTABLE NUS/09/261,115

CURRENT FILING DATE: 1999-03-03

NUMBER OF SEQ ID NOS: 78

SEQ ID NO 53

LENGHARE: Patentin Ver. 2.1

SEQ ID NO 53
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ; LOCATION: 1..19 —
; OTHER INFORMATION: upstream amplification primer 99-24592 for SEQ 3202,
US-09-422-978-7136
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Gарв
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ) OTHER INFORMATION: Description of Artificial Sequence: Customized ; OTHER INFORMATION: Oligonucleotide US-09-261-115-53
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Query Match 0.3%; Score 14.4; DB 1; Length 19; Best Local Similarity 93.8%; Pred. No. 1.4e+02; Matches 15; Conservative 0; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Query Match 0.3%; Score 14.4; DB 1; Length 19; Best Local Similarity 93.8%; Pred. No. 1.4e+02; Matches 15; Conservative 0; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Sequence 7136, Application US/09422978
Patent No. 6537751
GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    2668 CCATATATTACCCAAC 2683
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               132 GGTGGTGAGGCCCTCG 147
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TYPE: DNA ORGANISM: Artificial Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 4 GGTGGTGAGGCCCTGG 19
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TYPE: DNA ORGANISM: Homo Sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      NAME/KEY: primer_bind
LOCATION: 1..19
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 US-09-422-978-7136/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 FEATURE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Sequence 113, Application US/09345882

Patent No. 6399373

GENERAL INFORMATION:

APPLICANT: Bougueleret, Lydie

TITLE OF INVENTION: AND POLYMORPHIC MARKERS ASSOCIATED WITH SAID NUCLEIC ACID.

TITLE OF INVENTION: AND POLYMORPHIC MARKERS ASSOCIATED WITH SAID NUCLEIC ACID.

FILE REFERENCE: GENSET, 031A

CURRENT APPLICATION NUMBER: US 60/091,315

PRIOR PILING DATE: 1999-06-30

PRIOR APPLICATION NUMBER: US 60/111,909

PRIOR FILING DATE: 1999-12-10

NUMBER OF SEQ ID NOS: 140

SOFTWARE: Patent.pm

SEQ ID NO 113

LENGTH: 19
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       0.3%; Score 14.4; DB 1; Length 19;
93.8%; Pred. No. 1.4e+02;
tive 0; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             0.3%; Score 14.4; DB 1; Length 19; 93.8%; Pred. No. 1.4e+02; tive 0; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          NAME/KEY: primer_bind
LOCATION: 1..19
OTHER INFORMATION: microsequencing oligo for 5-136-174.mis1
COMPUTER READABLE FORM:
MEDIUM TYPE: Diskette
COMPUTER: IBM COMPALIABLE
OPERATING SYSTEM: DOS
SOFTWARE: FastSEQ for Windows Version 2.0
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/434,099A
FILING DATE: 03-MAY-1995
CLASSIFICATION: 435
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/236,979
FILING DATE: 02-MAY-1994
ATTORNEY/AGENT INPORMATION:
NAME: FURMAN, US DATE: BSQ., Theodore R
REGISTRATION NUMBER: 30,942
REFERENCE/DOCKET NUMBER: 30,942
REFERENCE/DOCKET NUMBER: 30,942
TELECOMMUNICATION INFORMATION:
TELEPHONE: 908-281-2372
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           3613 ACAGTGAAAATCTGGA 3628
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       558 GCTTGCCATTATGGGA 573
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           INFORMATION FOR SEQ ID NO: 22: SEQUENCE CHARACTERISTICS: LENGTH: 19 base pairs TYPE: nucleic acid STRANDEDNESS: single
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TYPE: DNA
ORGANISM: Artificial Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            4 ACAATGAAAATCTGGA 19
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      19 GCATGCCATTATGGGA 4
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Best Local Similarity 93.8
Matches 15; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Query Match 0.3
Best Local Similarity 93.8
Matches 15, Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ;
US-08-434-099A-22
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        US-09-345-882-113
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          US-09-345-882-113
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Query Match
```

ઠ g ð

```
Parwani, Anil
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    US-08-294-424-33
                                                                                                                                                                                                                                                                                                                                      US-09-232-338-43
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        US-08-294-424-33
                                                                                                                                                                                                                                                                                                                                                                                  Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                              Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Sequence 33, Application US/09696791

Patent No. 6770633

GENERAL INFORMATION:
APPLICANT: Tritz, Richard
TITLE OF INVENTION: RINDSTME THERAPY FOR THE TREATMENT OF PROLIFERATIVE
TITLE OF INVENTION: RINDSTME THERAPY FOR THE TREATMENT OF PROLIFERATIVE
FILE REFERENCE: 480124.407
CURRENT APPLICATION NUMBER: US/09/696,791
CURRENT APPLICATION NUMBER: 2000-10-25
NUMBER OF SEQ ID NOS: 4523
SOFTWARE: PATENTIN Ver. 2.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ..
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         .
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Query Match 0.3%; Score 14.4; DB 1; Length 19; Best Local Similarity 93.8%; Pred. No. 1.4e+02; Matches 15; Conservative 0; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Query Match 0.3%; Score 14.4; DB 1; Length 19; Best Local Similarity 93.8%; Pred. No. 1.4e+02; Matches 15; Conservative 0; Mismatches 1; Indels
                                                                                                                                                                              APPLICANT: JUNCANAILLY
APPLICANT: JUNCANAILLY
TITLE OF INVENTION: TRANSCRIPTIONAL REGULATORY FACTOR
FILE REFERENCE: 06501-068001
CURRENT APPLICATION NUMBER: US/09/698,295
CURRENT FILING DATE: 2000-10-27
PRIOR PILING DATE: 1999-04-30
PRIOR APPLICATION NUMBER: PCT/JP99/02340
PRIOR APPLICATION NUMBER: JAPAN 10/137631
PRIOR RILING DATE: 1998-04-30
NUMBER OF SEQ ID NOS: 10
SOFTWARE: FASELSEQ for Windows Version 4.0
SEQ ID NO 5:
LENGTH: 19
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ; OTHER INFORMATION: Cdk1 ribozyme binding site US-09-696-791-33
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        US-00-232-338-43/c
Sequence 43, Application US/09232338
Patent No. 6805867
GENERAL INFORMATION:
APPLICANT: Saif, Linda
                                                                                        US-09-698-295-5; Sequence 5, Application US/09698295; Patent No. 6689584; GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ) OTHER INFORMATION: primer for PCR
US-09-698-295-5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     2419 CCTCTGCTGCAACAAG 2434
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      4870 TTTTATTGTATGTT 4885
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1 cercagerecaácaag 16
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TYPE: DNA ORGANISM: Artificial Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  rrrrrrrcrararcri 3
19 CCATTTATTACCCAAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TYPE: DNA
ORGANISM: Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               US-09-696-791-33/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     SEQ ID NO 33
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         RESULT 212
  유
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             셤
```

```
Gaps
                                                                                                                                                                                                                                                                                                                                                                                                            ..
0
                                                                                                                                                                                                                                                                                                                                                           0.3%; Score 14.4; DB 1; Length 19; 93.8%; Pred. No. 1.4e+02; tive 0; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             0.3%; Score 14; DB 1; Length 14; 100.0%; Pred. No. 1.1e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Sequence 33, Application US/08294424
Patent No. 5800984
GENERAL INFORMATION:
APPLICANT: Vary, Calvin
TITLE OF INVENTION: TRIPLE HELIX FORMATION
NUMBER OF SEQUENCES: 49
CORRESPONDENCE ADDRESS:
ADDRESSEE: Fish & Richardson
STREET: 225 Franklin Street
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ZIP. 102110-2804
COMPUTER READABLE FORM:
MEDIUM TYPE: 3.5" Jishkette, 1.44 Mb storage COMPUTER: IBM PS/2 Model 50Z or 55SX OPERATING SYSTEM: IBM P.C. DOS (Version 3.30) SOFTWARE: WordPerfect (Version 5.0) CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/294,424
APPLICANT: Kim, Wonyong
APPLICANT: Chang, Keong-OK
APPLICANT: Chang, Keong-OK
TITLE OF INVENTION: Bowine Rotavirus Genes
FILE REFERENCE: 22727/04026
CURRENT APPLICATION NUMBER: US/09/232,338
CURRENT FILING DATE: 1999-01-15
NUMBER OF SEQ ID NOS: 50
SOFTWARE: Patentin version 3.0
LENGTH: 19
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              REFERENCE/DOCKET NUMBER: 00088-037001
TELECOMMUNICATION INFORMATION:
TELEPHONE: (617) 542-5070
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CLASSIFICATION: 435
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US/08/000,922
FILING DATE: 16 JAN 1993
APPLICATION NUMBER: US/07/629,601B
FILING DATE: 17-DEC-1990
ATTORNEY/AGENT INFORMATION:
NAME: Freeman, John W.
REGISTRATION NUMBER: 29,066
                                                                                                                                                                                                                                                                                                                                                                                                                                                          4663 AATTTTAATAGTTATA 4678
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    18 AATTTTAATACTTATA 3
                                                                                                                                                                                                                                                                   TYPE: DNA ORGANISM: Bovine rotavirus
                                                                                                                                                                                                                                                                                                                                                                                                            15; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TELEX: 200154
INFORMATION FOR SEQ ID NO:
SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              STATE: Massachusetts
COUNTRY: U.S.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TYPE: nucleic acid
STRANDEDNESS: single
                                                                                                                                                                                                                                                                                                                                                                                   Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CITY: Boston
```

```
syndecan-4 cytoplasmic domain signaling pathway
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         COUNTRY: USA
ZIP: 01930
COMPUTER READABLE FORM:
MEDIUM TYPE: Diskette, 3.50 inch, 1.40 Mb storage COMPUTER: Dell PC
COMPUTER: Dell PC
COMPUTER: Dell PC
CORRATING SYSTEM: MS DOS
SOFTWARE: Microsoft word version 97
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/190,976B
FILING DATE: 12-NO. 6815187-1998
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Score 14; DB 1; Length 14; Pred. No. 1.1e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                     0.3%; Score 14; DB 1; Length 14;
100.0%; Pred. No. 1.1e+02;
ive 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Sequence 14, Application US/09190976B

Patent No. 6815187

GENERAL INFORMATION:
APPLICANT: STOWNIC, Michael
Horowitz, Arie
TITLE OF INVENTION: Stimulation of angiogenesis via
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ATTORNEY/AGENT INFORMATION:
NAME: David Prashker, Esq.
REGISTRATION NUMBER: 29,693
REPERENCE/DOCKET NUMBER: BIS-041
TELECOMMUNICATION:
TELECOMMUNICATION:
TELEPHONE: (978) 525-3794
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TOPOLOGY: linear

MOLECULE TYPE: peptide

SEQUENCE DESCRIPTION: SEQ ID NO: 14:
US-09-190-976B-14
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ADDRESSEE: David Prashker, Esq. STREET: P.O. Box 5387
CITY: Magnolia
                                                                                                                                                                                                                                                                                                                          TOPOLOGY: linear MOLECULE TYPE: other nucleic acid DESCRIPTION: /desc = "Synthetic DNA"
                  APPLICATION NUMBER: JP 249457/1995
FILING DATE: 27-SEP-1995
ATTORNEY/AGENT INFORMATION:
                                                                                  NAME: Wegner, Harold C.
REGISTRATION NUMBER: 25,258
REFERENCE/DOCKET NUMBER: 74129/432
TELECOMMUNICATION INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CLASSIFICATION: Unknown
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     0.3%; S
100.0%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            STATE: Massachusetts
                                                                                                                                                                TELEPHONE: (202) 672-5300
TELEPAX: (202) 672-5399
INFORMATION FOR SEQ ID NO: 15:
SEQUENCE CHARACTERISTICS:
LENGTH: 14 base pairs
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             INFORMATION FOR SEQ ID NO: 14:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              NUMBER OF SEQUENCES: 2:
CORRESPONDENCE ADDRESS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               20 AATTCGGCACGAGG 33
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1 AATTCGGCACGAGG 14
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   14; Conservative
                                                                                                                                                                                                                                                                                   TYPE: nucleic acid
STRANDEDNESS: sing
                                                                                                                                                                                                                                                                                                                                                                                                                                                               Best Local Similarity
Matches 14; Conserva
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  US-09-190-976B-14
                                                                                                                                                                                                                                                                                                                                                                                              US-09-043-861-15
                                                                                                                                                                                                                                                                                                                                                                                                                                            Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          임
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ö
ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Gaps
  Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 OTHER INFORMATION: Description of Artificial Sequence: Pre-sequence OTHER INFORMATION: of an Insert
  ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Query Match 0.3%; Score 14; DB 1; Length 14; Best Local Similarity 100.0%; Pred. No. 1.1e+02; Matches 14; Conservative 0; Mismatches 0; Indels
  Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Sequence 15, Application US/09043861
Patent No. 6793917
GENERAL INFORMATION:
APPLICANT: YOSHIDA, Tetsuya
APPLICANT: YOSHIDA, Tetsuya
APPLICANT: YOSHIE, Osamu
ITLE OF INVENTION: TYPE CC CHEMOKINE-LIKE PROTEIN
CORRESPONDENCE ADDRESS:
CORRESPONDENCE ADDRESS:
ADDRESSEE: FOLEY & LARDNER
STREET: 3000 K Street, N.W.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             SOFTWARE: Patentin Release #1.0, Version #1.30 CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/043,861
FILING DATE: 27-MAR-1998
CLASSIFICATION 1435
PRIOR APPLICATION NUMBER: WO PCT/JP96/02801
APPLICATION NUMBER: WO PCT/JP96/02801
FILING DATE: 27-SEP-1996
PRIOR APPLICATION NUMBER: US 56044/1996
FILING DATE: 13-MAR-1996
  ö
Mismatches
                                                                                                                                                                                                                                                   TITLE OF INVENTION: NO. 6787639utaka
TITLE OF INVENTION: NOVEL COLLECTIN
FILE REFERENCE: 19036746615
CURRENT APPLICATION NUMBER: US/09/600,932
CURRENT FILING DATE: 1998-07-24
PRIOR PILING DATE: 1998-07-24
PRIOR PILING DATE: 1998-01-23
NUMBER OF SEQ ID NOS: 29
SOFTWARE: Patentin Ver: 2.0
SEQ ID NO 4
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             STATE: D.C.
COUNTRY: U.S.A.
ZIP. 20007-5109
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC COMPALIBLE
OPERATING SYSTEM: PC-DOS/MS-DOS
                                                                                                                                                                       3-09-600-932-4
Sequence 4, Application US/09600932
Patent No. 6787639
GENERAL INFORMATION:
;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TYPE: DNA
ORGANISM: Artificial Sequence
FEATURE:
                                         2908 GAGGAAGAGGAAGA 2921
                                                                                  1 GAGGAAGAGAAGA 14
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    19 GAATTCGGCACGAG 32
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1 GAATTCGGCACGAG 14
14; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CITY: Washington
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  JS-09-043-861-15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  US-09-600-932-4
Matches
                                                                                  a
                                           ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              셤
```

Gaps

```
Query Match 0.3%; Score 14; DB 1; Length 16; Best Local Similarity 100.0%; Pred. No. 1.3e+02; Matches 14; Conservative 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                STATE: Virginia
COUNTRY: United States
ZID: 22313-1404
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/195,991
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Score 14; DB 1; L. Pred. No. 1.3e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      E: BURNS, DOANE, SWECKER & MATHIS P.O. Box 1404
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           0.3%; Score 14; DB ilarity 100.0%; Pred. No. 1.3 Conservative 0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CLASSIFICATION:
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 08/585,888
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    NAME: McGowan, Malcolm K.
REGISTRATION NUMBER: 39,300
REFERENCE/DOCKET NUMBER: 010
TELECOMMUNICATION: TELEPHONE: (703) 836-6620
                                                                                                                                                                   TOPOLOGY: linear MOLECULE TYPE: DNA (genomic)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 MOLECULE TYPE: DNA (genomic)
                                                                                                                                                                                                                                                                                                                                           2802 TCACATGCGTCAGA 2815
                      TELEPHONE: (,co) correlation TELEFAX: (702) 836-2021
INFORMATION FOR SEQ ID NO: 34
SEQUENCE CHARACTERISTICS:
LENGTH: 16 base pairs
TYPE: nucleic acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     2802 TCACATGCGTCAGA 2815
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TELEFAX: (703) 836-2021
INFORMATION FOR SEQ ID NO: 3
SEQUENCE CHARACTERISTICS:
LENGTH: 16 base pairs
TYPE: nucleic acid
                                                                                                                                                                                                                                                                                                                                                                                     14 TCACATGCGTCAGA 1
                                                                                                                                                 single
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Local Similarity
nes 14; Conserva
                    (703)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CITY: Alexandria
STATE: Virginia
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  linear
                                                                                                                                            STRANDEDNESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         STRANDEDNESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                    RESULT 219
US-09-195-991-34/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              FILING DATE:
                                                                                                                                                                                                             US-08-585-888-34
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          US-09-195-991-34
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               STREET:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Matches
                                                                                                                                                                                                                                                                                                                                               ò
                                                                                                                                                                                                                                                                                                                                                                                 g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ð
  ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Gaps
  Gaps
                                                                                                                                                                                                                               GENERAL INFORMATION:
APPLICANT: 11, WAN-LIANG ROBERT
APPLICANT: ZHOU, JIAN S.
TITLE OF INVENTION: FLUORESCENT OLIGONUCLEOTIDES AND USES THEREOF
TILE REFERENCE: 16517.248
CURRENT APPLICATION NUMBER: US/09/859,736
CURRENT APPLICATION NUMBER: 0201-05-18
PRIOR PILING DATE: 2001-05-19
PRIOR FILING DATE: 2000-05-19
NUMBER OF SEQ ID NOS: 7
SOFTWARE: Patentin Ver. 2.1
SEQ ID NO 7
LENGTH: 14
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Sequence 34, Application US/085888

| Sequence 34, Application US/085888
| Patent No. 587415
| GENERAL INFORMATION:
| APPLICANT: KUIPER, Martin T.R. |
| APPLICANT: VOS, Pieter |
| TITLE OF INVENTION: AMPLIFICATION OF SIMPLE SEQUENCE REPEATS |
| NUMBER OF SEQUENCES |
| CORRESPONDENCE ADDRESS: |
| ADDRESSEE: BURNS, DOANE, SWECKER & MATHIS |
| STREET: P.O. Box 1404 |
| CITY: Alexandria |
| STATE: Virginia |
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ) OTHER INFORMATION: Description of Artificial Sequence: Synthetic; ) OTHER INFORMATION: dT oligonucleotide
US-09-859-736-7
  ;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Length 14;
  Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ZIP: 22313-1404
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/585,888
FILING DATE: 16-JAN-1996
CLASSIFICATION: 435
  ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Query Match 0.3%; Score 14; DB 1; Le Best Local Similarity 100.0%; Pred. No. 1.1e+02; Matches 14; Conservative 0; Mismatches 0;
Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   NAME: McGowan, Malcolm K.
REGISTRATION NUMBER: 39,300
REFERENCE/DOCKET NUMBER: 010830-097
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         PRIOR APPLICATION DATA:
APPLICATION NUMBER: EP 95400080.8
FILING DATE: 16-JAN-1995
ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                       Sequence 7, Application US/09859736 Patent No. 6838244
  .
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TYPE: DNA
ORGANISM: Artificial Sequence
FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              5025 AAAAAAAAAAA 5038
                                        19 GAATTCGGCACGAG 32
                                                                     1 GAATTCGGCACGAG 14
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          STATE: Virginia
COUNTRY: United States
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    14 AAAAAAAAAAAAA 1
14; Conservative
                                                                                                                                                                     US-09-859-736-7/c
Matches
                                          ઠે
                                                                              원
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 g
```

```
ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ö
Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Gaps
  ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               .
0
                                                                                                                                                                   Sequence 34, Application US/09195991

Patent No. 6218119

GENERAL INFORMATION:
APPLICANT: KUIPER, Martin T.R.
APPLICANT: ZABRAU, Marc
APPLICANT: VOS, Pieter
TITLE OF INVENTION: AMPLIFICATION OF SIMPLE SEQUENCE REPEATS
NUMBER OF SEQUENCES: 47

CORRESPONDENCE ADDRESS:
ADDRESSEE: BURNS, DOANE, SWECKER & MATHIS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Length 16;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        14 rcacardcercaga 1
```

```
Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            E WO
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 0.3%; Score 14; DB 1; Length 17;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            0; Indels
                                                                                                                                                                                                                                                                                                                                       COMPUTER: BLUE SET STATES STORY OF STATES STORY OF STATES STORY OF STATES STORY OF STATES SOFTWARE: Word Perfect 5.1

CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/292,620A
FILING DATE: August 17, 1994
CLASSIFICATION DATA:
PRIOR APPLICATION DATA: including application PRIOR APPLICATION DATA: described below:
APPLICATION NUMBER: 08/008,895
FILING DATE: January 19, 1993
APPLICATION NUMBER: 07/989,849
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1.4e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Substitution:
Substitution:
James McSwiggen
James McSwiggen
Jean Sullivan
Nenneth G. Draper
INVENTION: BIBGZYME TREATMENT OF
INVENTION: BIBGASES OR CONDITIONS
INVENTION: RELATED TO LEVELS OF
INVENTION: NATHACELLULAR ADHESION
INVENTION: MOLECULE-1 (I-CAM-1)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Query Match

0.3%; Score 1.4
Best Local Similarity 100.0%; Pred. No. 1.4
Matches 14; Conservative 0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Sequence 1748, Application US/08292620A; Patent No. 5837542; GENERAL INFORMATION: APPLICANT: Sugan Grimm; APPLICANT: James McSwigen; APPLICANT: Sean Sullivan APPLICANT: Kenneth G. Draper; APPLICANT: Kenneth G. Draper
                                                                                                                                                                                 CITY: Los Angeles
STATE: California
COUNTRY: U.S.A.
ZIP: 90071-2066
COMPUTER READABLE FORM:
MEDIUM TYPE: 3.5" Diskette, 1.44 Mb
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    APPLICATION WOUSEN.
FILING DATE: December 7, 1992
ATTORNEY/AGENT INFORMATION:
NAME: WAZDUES, RICHARD J.
REGISTRATION NUMBER: 32,327
REFERENCE/DOCKET NUMBER: 30,327
REPERENCE/DOCKET NUMBER: 208/1
TELEPHONE: (213) 489-1600
TELEFAX: (213) 955-0440
TELERX: 67-3510
INFORMATION FOR SEQ ID NO: 1731:
SEQUENCE CHARACTERISTICS:
LENGTH: 17 base pairs
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           3: Lyon & Lyon
633 West Fifth Street
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       287 TCTGCTGAGACCCC 300
TITLE OF INVENTION: RELITIES OF INVENTION: INTITLE OF INVENTION: MOLIVER OF SEQUENCES: 23 CORRESPONDENCE ADDRESSES: CORRESPONDENCE LYON & LYO STREET: 633 West Fift
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TITLE OF INVENTION: I
TITLE OF INVENTION: I
TITLE OF INVENTION: I
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   nucleic acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              NUMBER OF SEQUENCES:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TOPOLOGY: linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          RESULT 222
US-08-292-620A-1748/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 US-08-292-620A-1731
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ö
                                                                                                                                                                                                                                                                                                                                                                                       COUNTRY: U.S.A.

COMPUTER READABLE FORM:

MEDIUM TYPE: Floppy disk

COMPUTER: IBM PC compatible

COMPUTER: IBM PC compatible

OPERATING SYSTEM: PC-DOS/MS-DOS

SOFTWARE: Patentin Release #1.0, Version #1.30 (EPO)

CURRENT APPLICATION DATA:

APPLICATION NUMBER: US/09/155,885A

FILING DATE: 08-OCT-1998

CLASSIFICATION: <Unknown>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               .
0
                                                                                                                                                                                   ROSSAU, RUDI
MARTINS, GERRT
TITLE OF INVENTION: METHOD FOR TYPING AND DETECTING HBV
NUMBER OF SEQUENCES: 313
CORRESPONDENCE ADDRESS:
ADDRESSES: NIXON & VANDERHYE P.C.
STREET: 1100 NORTH GLEBE ROAD
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Length 16;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Query Match 0.3%; Score 14; DB 1; Le
Best Local Similarity 100.0%; Pred. No. 1.3e+02;
Matches 14; Conservative 0; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                PRIOR APPLICATION DATA:
APPLICATION NUMBER: PCT/EP97/02002
FILING DATE: 21-APR-1997
APPLICATION NUMBER: EP 96870053.4
FILING DATE: 19-APR-1996
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    APPLICANT: Susan Grimm
APPLICANT: Dan T. Stinchcomb
APPLICANT: James McSwiggen
APPLICANT: Sean Sullivan
APPLICANT: Kenneth G. Draper
TITLE OF INVENTION: BISEASES OR CONDITIONS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        NAME: SADOPF, B.J.
REGISTRATION NUMBER: 36,663
REFERENCE/DOCKET NUMBER: 2551-5
TELECOMMUNICATION INFORMATION:
TELEPHONE: (703) 816-4000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    · ANTI-SENSE: NO SEQUENCE DESCRIPTION: SEQ ID NO: 236:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           S-08-292-620A-1731/c
Sequence 1731, Application US/08292620A
Patent No. 5837542
GENERAL INFORMATION:
APPLICANT: Susan Grimm
APPLICANT: Dan T. Stinchcomb
                                                                                      Sequence 236, Application US/09155885A Patent No. 6709812 GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TYPE: nucleic acid
STRANDEDNESS: single
TOPOLOGY: linear
MOLECULE TYPE: DNA (genomic)
HYPOTHETICAL: NO
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ELEFAX: (703) 816-4100
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ATTORNEY/AGENT INFORMATION:
                                                                                                                                                             APPLICANT: STUYVER, LIEVEN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            LENGTH: 16 base pairs
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 INFORMATION FOR SEQ ID NO: 236
SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1977 AGCCCAAGATGATG 1990
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     14 AGCCCAAGATGATG 1
                                                                                                                                                                                                                                                                                                                                                                         STATE: VIRGINIA
                                                                                                                                                                                                                                                                                                                                                 CITY: ARLINGTON
                                                                       -09-155-885A-236/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               US-09-155-885A-236
```

g ઠ

```
Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               0.3%; Score 14; DB 1; Length 17;
100.0%; Pred. No. 1.4e+02;
tive 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 APPLICANT: James M.Swiggen
APPLICANT: Sean Sullivan
TITLE OF INVENTION: RIBGIANE TO LEVELS OF
TITLE OF INVENTION: INTRACELLULAR ADHESION
TITLE OF INVENTION: MOLECULE-1 (I-CAM-1)
NUMBER OF SEQUENCES: 2390
CORRESPONDENCE ADDRESS:
ADDRESSEE: Lyon & Lyon
STREET: Sulte 4700
CITY: Los Angeles
STREET: Sulte 4700
CITY: Los Angeles
STREET: G. Angeles
STREET: G. Angeles
STREET: 3.5 In Street
COUNTRY: U.S.A.
ZIP: 90071-2066
COMPUTER READABLE FORM:
MEDIUM TYPE: SLORGES:
                                                                                                                                                         FILING DATE:
CLASSIFICATION:
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US/08/292,620
FILING DATE: August 17, 1994
APPLICATION NUMBER: 08/008,895
FILING DATE: January 19, 1993
APPLICATION NUMBER: 07/989,849
FILING DATE: December 7, 1992
ATTORNEY AGENT INFORMATION:
                                      COMPUTER: IBM Compatible
OPERATING SYSTEM: IBM P.C. DOS 5.0
SOFTWARE: Word Perfect 5.1
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/071,845
                                                                                                                                                                                                                                                                                                                                                                                                 NAME: Warburg, Richard J.
REGISTRATION NUMBER: 32,327
REFERENCE/DOCKET NUMBER: 208/149
TELECOMMUNICATION INFORMATION:
TELEPHONE: (213) 489-1600
TELERAX: (213) 955-0440
TELEX: 67-3510
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 COMPUTER: IBM Compatible
OPERATING SYSTEM: IBM P.C. DOS 5.0
SOFTWARE: Word Perfect 5.1
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/071,845
FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Sequence 1748, Application US/09071845
Patent No. 6132967
GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TELEX: 67-3510
INFORMATION FOR SEQ ID NO: 1731:
SEQUENCE CHARACTERISTICS:
LENGTH: 17 base pairs
TYPE: mucleic acid
STRANDENESS: single
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     APPLICANT: Susan Grimm
APPLICANT: Dan T. Stinchcomb
APPLICANT: James McSwiggen
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                287 TCTGCTGAGACCCC 300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                17 rérécréadacece 4
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Query Match 0.3
Best Local Similarity 100.
Matches 14; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ; TOPOLOGY: linear
US-09-071-845-1731
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 US-09-071-845-1748/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        RESULT 224
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Length 17;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        0; Indels
                                                                                                   ZIP: U.S.A. C.S.A. C.S.A. C.S.A. C.S.A. C.S.A. C.S.A. C.S.A. MEDIUM TYPE: 3.5. Diskette, 1.44 Mb MEDIUM TYPE: 3.5. Diskette, 1.44 Mb MEDIUM TYPE: 3.5. Diskette, 1.44 Mb MEDIUM TYPE: storage COMPUTER: IBM Compatible OPERATING SYSTEM: IBM P.C. DOS 5.0 SOFTWARE: Word Perfect 5.1 CURRENT APPLICATION DATA: APPLICATION NUMBER: US/08/292,620A FILING DATE: AUGUST 17, 1994
CLASSIFICATION DATA: including application PRIOR APPLICATION DATA: including application PRIOR APPLICATION DATA: described below: APPLICATION NUMBER: 08/008,895
FILING DATE: December 7, 1993
APPLICATION NUMBER: 07/989,849
FILING DATE: December 7, 1992
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Score 14; DB 1; Le
Pred. No. 1.4e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    US-09-071-845-1731/C

US-09-071-845-1731/C

Sequence 1731, Application US/09071845

Patent No. 6132967

GENERAL INFORMATION

APPLICANT: Susan Grimm
APPLICANT: James McSwiggen

APPLICANT: James McSwiggen

APPLICANT: Sean Sullivan

TITLE OF INVENTION: RIBOZYME TREATMENT OF

TITLE OF INVENTION: RIBOZYME TREATMENT OF

TITLE OF INVENTION: RELATED TO LEVELS OF

TITLE OF INVENTION: INTRACELLULAR ADHESION

TITLE OF INVENTION: ADNESS:

ADDRESSEE: LYON & IV.~

STREET: C.~

STREET: C.~
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Query Match 0.3%; Score 14; DB Best Local Similarity 100.0%; Pred. No. 1.4 Matches 14; Conservative 0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             COUNTRY: U.S.A.
ZIP: 90071-2066
COMPUTER READABLE FORM:
MEDIUM TYPE: 3.5" Diskette, 1.44 Mb
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            NAME: Warburg, Richard J.
REGISTRATION NUMBER: 32,327
REFERENCE/DOCKET NUMBER: 208/14
TELECOMMUNICATION INFORMATION:
TELEPRONE: (213) 489-1600
TELEPRONE: (213) 955-0440
ITELERX: 67-3510
INFORMATION FOR SEQ ID NO: 1748:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ADDRESSEE: Lyon & Lyon
STREET: 633 West Fifth Street
STREET: Suite 4700
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      287 TCTGCTGAGACCCC 300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 rcrecreasacccc 4
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            SEQUENCE CHARACTERISTICS:
LENGTH: 17 base pairs
TYPE: nucleic acid
STRANDEDNESS: single
STREET: Sulte
CITY: Los Angeles
STATE: California
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Los Angeles
California
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ; TOPOLOGY: 1:
US-08-292-620A-1748
```

a

```
APPLICANT: GREN, Wencheng
APPLICANT: GREN, Wencheng
APPLICANT: GIRNOW, MAK:
TITLE OF INVENTION, MYOSIN-LIKE GENE EXPRESSED IN HUWAN HEART AND MUSCLE
FILE REFERENCE: AEGONICA-7
CURRENT PAPLICATION NUMBER: US 60/207,456
FRIOR PLILING DATE: 2000-05-25
FRIOR APPLICATION NUMBER: US 60/207,456
FRIOR PLILING DATE: 2000-00-27
FRIOR PLILING DATE: 2000-10-04
FRIOR PLILING DATE: 2001-01-30
FRIOR FLILING DATE: 2001-01-30
FRIOR PLILING DATE: 2001-01-30
FRIOR FLILING DATE: 2001-01-30
FRIOR FLING DATE: 2001-01-30
FRIOR FRI
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ..
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Length 17;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                / Match 0.3%; Score 14; DB Local Similarity 100.0%; Pred. No. 1.4 les 14; Conservative 0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      US-09-866-108A-10545
; Sequence 10545, Application US/09866108A
; Patent No. 6686188
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  2102 ATAATGAAGAATA 2115
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    4 ATAATGAAGAATA 17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ORGANISM: Homo
US-09-866-108A-1054
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            US-09-515-012A-16

Sequence 16, Application US/09535012A

Sequence 16, Application US/09535012A

Sequence 16, Application US/09535012A

Sequence 16, Application US/09535012A

Truck OF INVENTATION

TITLE OF INVENTATION METHOR OF Detecting Sulphate- Reducing Bacteria

TITLE OF INVENTATION NUMBER: US/09/535,012A

CURRENT APPLICATION NUMBER: US/09/535,012A

CURRENT APPLICATION NUMBER: 9903637

PRIOR FILING DATE: 1999-03-24

NUMBER OF SEQ ID NOS: 25

SOFTWARE: Patentin Ver: 2.1

SEQ ID NO 16

LENGTH: 17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ..
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Score 14; DB 1; Length 17;
Pred. No. 1.4e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Length 17;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Query Match 0.3%; Score 14; DB Best Local Similarity 100.0%; Pred. No. 1.4 Matches 14; Conservative 0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Query Match 0.3%; Score 14; Best Local Similarity 100.0%; Pred. No. Matches 14; Conservative 0; Mismatcl
     PRIOR APPLICATION DATA:
APPLICATION NUMBER:
FILING DATE: August 17, 1994
APPLICATION NUMBER: 08/006,895
FILING DATE: January 19, 1993
APPLICATION NUMBER: 07/989,849
FILING DATE: December 7, 1992
ATTORNEY/AGENT INFORMATION:
NAME: WAADLUG, RICHARY 0.
REGISTRATION NUMBER: 32,327
REFERENCE/DOCKET NUMBER: 208/149
TELEPHONE: (213) 489-1600
TELEPHONE: (213) 955-0440
TELEPAX: (213) 955-0440
TELEPAX: (213) 955-0440
TELEFAX: 67-3510
INFORMATION FOR SED ID NO: 1748:
SEQUENCE CHARACTERISTICS:
LENGTH: 17 base pairs
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Sequence 10544, Application US/09866108A
Parent No. 6686188
GENERAL INFORMATION:
APPLICANT: GU, Yizhong
APPLICANT: JI, Yonggang
APPLICANT: PENN, Sharron G.
APPLICANT: HANZEL, David K.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TYPE: DNA ORGANISM: Desulfovibrio vulgaris
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               OTHER INFORMATION: aspl2 primer US-09-535-012A-16
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1138 CGGAGGAGAACTTG 1151
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                287 TCTGCTGAGACCCC 300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    17 rerecreasacee 4
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TYPE: nucleic acid
STRANDEDNESS: single
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ; TOPOLOGY: linear
US-09-071-845-1748
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       US-09-866-108A-10544
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        FEATURE:
```

g

ò

ઠ

Gaps

```
0.3%; Score 14; DB 1; Length 17;
100.0%; Pred. No. 1.4e+02;
ive 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                2102 ATAATGAAGAAATA 2115
                                                                  Query Match 0.3%
Best Local Similarity 100.0
Matches 14; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ; ORGANISM: Homo sapiens
US-09-866-108A-10547
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       US-09-866-108A-10547
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TYPE: DNA ORGANISM:
                                                                                                                                                                                                                                                                                                      à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   엄
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     APPLICANT: No. 686188
APPLICANT: No. 686188
APPLICANT: PERN, Sharron G.
APPLICANT: PERN, Sharron G.
APPLICANT: PERN, Sharron G.
APPLICANT: PERN, Sharron G.
APPLICANT: PERN, David R.
APPLICANT: RANK, David R.
APPLICANT: RANK, David R.
APPLICANT: RANK, David R.
APPLICANT: SHANNON, MARK
TITLE OF INVENTION, WASCIN-LIKE GENE EXPRESSED IN HUMAN HEART AND MUSCLE CURRENT FILING DATE: 2001-05-25
FRIOR PELLOR DATE: 2000-10-24
PRIOR PELLOR DATE: 2000-10-04
PRIOR APPLICATION NUMBER: US 60/235, 55
PRIOR APPLICATION NUMBER: PCT/US01/00667
PRIOR FILING DATE: 2001-01-30
PRIOR PELLING DATE: 2001-01-30
PRIOR PELLOR PELLOR PELLOR PELLOR PELLOR PEL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ô
PRIOR FILING DATE: 2001-01-30
PRIOR APPLICATION NUMBER: PCT/US01/00669
PRIOR APPLICATION NUMBER: PCT/US01/00665
PRIOR PILING DATE: 2001-01-30
PRIOR PELING DATE: 2001-01-30
PRIOR PELING DATE: 2001-01-30
PRIOR PILING D
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Length 17;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Query Match 0.3%; Score 14; DB 1; Length 17; Best Local Similarity 100.0%; Pred. No. 1.4e+02; Matches 14; Conservative 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Sequence 10546, Application US/09866108A Patent No. 6686188
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         2102 ATAATGAAGAAATA 2115
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ATAATGAAGAATA 16
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ; ORGANISM: Homo sapiens
US-09-866-108A-10545
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TYPE: DNA CRGANISM: Homo sapiens US-09-866-108A-10546
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           US-09-866-108A-10546
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  g
```

```
ö
                                                                                                                                                                                                                                                                                                                                    Gaps
                                                                                                                                                                                                                                                                                                                                    .
0
                                                                                                                                                                                                                                                                                                                     Score 14; DB 1; Length 17;
Pred. No. 1.4e+02;
0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                             RESULT 230
US-09-155-885A-235/c
| Sequence 235, Application US/09155885A
| Patent No. 6709812
| Patent No. 6709812
| GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                  0.3%; Scc.
100.0%; Pre
                                                                                                                                                                                                                                                                                                                                                                                                             APPLICANT: STUYVER, LIEVEN
ROSSAU, RUDI
MAERTENS, GEERT
                                                                                                                                                                                                                                                                                                                                                2102 ATAATGAAGAAATA 2115
2 ATAATGAAGAATA 15
                                                                                                                                                                                                                                                                                                                                                           1 ATAATGAAGAATA 14
                                                                                                                                                                                                                                                                                                                      Query Match
Best Local Similarity 100.
Matches 14; Conservative
```

```
Gape
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        0.3%; Score 14; DB 1; Length 17;
100.0%; Pred. No. 1.4e+02;
tive 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Score 14; DB 1; Length 18;
Pred. No. 1.5e+02;
0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Sequence 11, Application US/08294312B

Patent No. 6380369

GENERAL INFORMATION:
APPLICANT: Adams et al.
TITLE OF INVENTION: Human DNA Mismatch Repair Proteins
FILE REPRENCE: PF106P2
CURRENT FILING DATE: 1994-08-23

PRIOR FILING DATE: 1994-08-16

PRIOR PRICING DATE: 1994-01-16

PRIOR PLING DATE: 1994-01-27

NUMBER OF SEQ ID NOS: 78

SOFTWARE: PatentIn version 3.0

SEQ ID NO 11

LENGTH: 18
                                                                                    PRIOR APPLICATION DATA:

APPLICATION NUMBER: PCT/EP97/02002
FILING DATE: 21-APR-1997
APPLICATION NUMBER: EP 96870053.4
FILING DATE: 19-APR-196
ATTORNET/ING DATE: 19-APR-196
ATTORNET/AGENT INFORMATION:
NAME: SADOFF, B.J.
REGISTRATION NUMBER: 36,663
FEFERENCE/DOCKET NUMBER: 2551-5
TELECOMMUNICATION INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ANTI-SENSE: NO
SEQUENCE DESCRIPTION: SEQ ID NO: 237:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ) OTHER INFORMATION: hMLH1 sense primer
US-08-294-312B-11
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Sequence 11, Application US/08468024B
                                            FILING DATE: 08-Oct-1998
CLASSIFICATION: <Unknown>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        0.3%; Scc.
100.0%; Pre
                                                                                                                                                                                                                                                                                                                       (703) 816-4100
                                                                                                                                                                                                                                                                                                                                                                                                                                                   TOPOLOGY: linear
MOLECULE TYPE: DNA (genomic)
HYPOTHETICAL: NO
                                                                                                                                                                                                                                                                                                                                             INFORMATION FOR SEQ ID NO: 237:
SEQUENCE CHARACTERISTICS:
LENGTH: 17 base pairs
                                                                                                                                                                                                                                                                                                                                                                                                             TYPE: nucleic acid
STRANDEDNESS: single
      CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1977 AGCCCAAGATGATG 1990
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TYPE: DNA
ORGANISM: Artificial Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         4070 GGGACATGAGGTTC 4083
                                                                                                                                                                                                                                                                                                   TELEPHONE: (703)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  14; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     15 AGCCCAAGATGATG 2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Best Local Similarity 100.
Matches 14; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Best Local Similarity
Matches 14; Conserva
                                                                                                                                                                                                                                                                                                                                FELEFAX:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              US-09-155-885A-237
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        US-08-468-024B-11
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  JS-08-294-312B-11
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Gaps
                                                                                                                     STATE: VIRGINIA
STATE: VIRGINIA
COUNTRY: U.S.A.
ZIP: 22201-4714
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM FC Compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.30 (EPO)
CURRENT APPLICATION NUMBER: US/09/155,885A
FILING DATE: 08-Occ-1998
CLASSIFICATION NUMBER: PCT/EP97/02002
FILING DATE: 21-APR-1997
APPLICATION NUMBER: PCT/EP97/02002
FILING DATE: 19-APR-1996
FILING DATE: 19-APR-1996
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ô
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ZIP: 22201-4714

COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.30 (EPO)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ROSSAU, RUDI
RAERTENS, GEERT
MAERTENS, GEERT
NUMBER OF SEQUENCES: 313
CORRESPONDENCE ADDRESS:
ADDRESSEE: NIXON & VANDERHYE P.C.
STREET: 1100 NORTH GLEBE ROAD
CITY: ARLINGTON
STRATE: UISINA
TITLE OF INVENTION: METHOD FOR TYPING AND DETECTING HBV NUMBER OF SEQUENCES: 313
CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Length 17;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       0.3%; Score 14; DB 1; Le
100.0%; Pred. No. 1.4e+02;
tive 0; Mismatches 0;
                                                              ADDRESSEE: NIXON & VANDERHYE P.C. STREET: 1100 NORTH GLEBE ROAD CITY: ARLINGTON
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ANTI-SENSE: NO
SEQUENCE DESCRIPTION: SEQ ID NO: 235:
US-09-155-885A-235
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     REGISTRATION NUMBER: 36,663
REFERENCE/DOCKET NUMBER: 2551-5
TELECOMMUNICATION INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Sequence 237, Application US/09155885A Patent No. 6709812 GENERAL INFORMATION:
APPLICANT: STUTVER, LIEVEN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TELEPHONE: (703) 816-4000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TELEFAX: (703) 816-4100
INFORMATION FOR SEQ ID NO: 235:
SEQUENCE CHARACTERISTICS:
LENGTH: 17 base pairs
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ATTORNEY/AGENT INFORMATION:
NAME: SADOFF, B.J.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TOPOLOGY: linear MOLECULE TYPE: DNA (genomic)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TYPE: nucleic acid
STRANDEDNESS: single
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1977 AGCCCAAGATGATG 1990
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Best Local Similarity 100.
Matches 14; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   HYPOTHETICAL: NO
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        JS-09-155-885A-237/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ઠે
```

```
Sequence 5372, Application US/09422978

Fatent No. 6537751

GENERAL INFORMATION:

APPLICANT: Cohen. Daniel

APPLICANT: Chumakov, Ilya

TITLE OF INVENTION:

FILE REFERENCE: GENSET. 020CP1

CURRENT APPLICATION NUMBER: US/09/422,978

CURRENT FILING DATE: 1999-04-21

CURRENT FILING DATE: 1999-04-21

EARLIER PELICATION NUMBER: US 60/109,732

EARLIER PILING DATE: 1998-11-23

EARLIER FILING DATE: 1998-04-21

EARLIER FILING DATE: 1998-04-21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       NAME/KEY: primer_bind
LOCATION: 1..18
) OTHER INFORMATION: upstream amplification primer 99-24441 for SEQ 1438,
US-09-422-978-5372
                                                                                                                                                                                                                                                                                                                                                               Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Gaps
                                                                                                                                                                                                                                                                                                                                                               ;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       .;
0
                                                                                                                                                                                                                                                                                            Query Match 0.3%; Score 14; DB 1; Length 18; Best Local Similarity 100.0%; Pred. No. 1.5e+02; Matches 14; Conservative 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Query Match 0.3%; Score 14; DB 1; Length 18; Best Local Similarity 100.0%; Pred. No. 1.5e+02; Matches 14; Conservative 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        RESULT 237
US-08-465-679-11

Sequence 11, Application US/08465679

Fatent No. 6610477

GENERAL INFORMATION:

APPLICANT: Haseltine et al.

TILLE OF INVENTION: Human DNA Mismatch Repair Proteins
FILE REFERENCE: PF106P4

CURRENT APPLICATION NUMBER: US/08/465,679

CURRENT PILING DATE: 1995-06-06

PRIOR FILING DATE: 1994-08-23

PRIOR FILING DATE: 1994-03-16

PRIOR FILING DATE: 1994-03-16
                                                                                                                 TYPE: DNA ORGANISM: Desulfovibrio vulgaris
                                                                                                                                                                                                      CTHER INFORMATION: APS14 primer US-09-535-012A-10
                                                                                                                                                                                                                                                                                                                                                                                                             1138 CGGAGGAGAACTTG 1151
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           888 AGACAATCTCTATG 901
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    3 cécacidadorire 16
NUMBER OF SEQ ID NOS: 25
SOFTWARE: PatentIn Ver. 2.1
SEQ ID NO 10
. LENGTH: 18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1 AGACAATCTCTATG 14
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TYPE: DNA
ORGANISM: Homo Sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               US-09-422-978-5372
                                                                                                                                                                              FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         엄
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       RESULT 235
US-09-535-012A-10
Sequence 10, Application US/09535012A
Sequence 10, Application US/09535012A
Sequence 10. 6531281
GENERAL INFORMATION:
TITLE OF INVENTION: Method of Detecting Sulphate- Reducing Bacteria
FILE REFERENCE: 111628-00114
FILE REFERENCE: 1000-03-24
CURRENT PALICATION NUMBER: 08/09/535,012A
CURRENT FILING DATE: 2000-03-24

PRIOR PILING DATE: 1999-03-24
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               .
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ..
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Query Match 0.3%; Score 14; DB 1; Length 18; Best Local Similarity 100.0%; Pred. No. 1.5e+02; Matches 14; Conservative 0; Mismatches 0; Indels
GENERAL INTORMATION:
APPLICANT: Haseltine et al.
TITLE OF INVENTION: Human DNA Mismatch Repair Proteins
FILE REFERENCE: PF10.694
CURRENT APPLICATION NUMBER: US/08/468,024B
CURRENT APPLICATION NUMBER: US/24,312
PRIOR FILING DATE: 1995-06-06
PRIOR APPLICATION NUMBER: 08/210,143
PRIOR FILING DATE: 1994-08-23
PRIOR APPLICATION NUMBER: 08/210,143
PRIOR APPLICATION NUMBER: 08/107,757
PRIOR FILING DATE: 1994-01-27
NUMBER OF SEQ ID NOS: 78
SOFTWARE: Patentin version 3.0
SEQ ID NO 11
LENGTH: 18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Query Match 0.3%; Score 14; DB 1; Length 18; Best Local Similarity 100.0%; Pred. No. 1.5e+02; Matches 14; Conservative 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              GENERAL INFORMATION:
APPLICANT: Adams et al.
TITLE OF INVENTION: Human DNA Mismatch Repair Proteins
FILE REPERENCE: PF106
CURRENT APPLICATION NUMBER: US/08/187,757D
CURRENT FILIG DATE: 1994-01-27
NUMBER OF SEQ ID NOS: 33
SOFTWARE: Patentin version 3.0
LENGTH: 18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ; OTHER INFORMATION: hMLH1 sense primer US-08-468-0248-11
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ; OTHER INFORMATION: hMLH1 sense primer US-08-187-757D-9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ; Sequence 9, Application US/08187757D ; Patent No. 6482606
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TYPE: DNA ORGANISM: Artificial Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      4070 GGGACATGAGGTTC 4083
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ORGANISM: Artificial Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       4070 GGGACATGAGGTTC 4083
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1 GGGACATGAGGTTC 14
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1 GGGACATGAGGTTC 14
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  US-08-187-757D-9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TYPE: DNA
```

ઠ 쉽 ö

g ò

```
US-09-155-885A-145
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   쉱
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ઠે
                                                                                                                                                                                                                                                                     ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ö
                                                                                                                                                                                                                                                                     Gapв
                                                                                                                                                                                                                                                                     ;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           US-09-155-885A-145/c

| Sequence 145, Application US/09155885A
| Patent No. 6709812
| GENERAL IMPORMATION:
| APPLICANT: STUYVER, LIEVEN
| ROSSAU, RUDI
| MAERTENS, GERT
| TITLE OF INVENTION: METHOD FOR TYPING AND DETECTING HBV
| NUMBER OF SEQUENCES: 313
| CORRESPONDENCE ADDRESSE:
| STREET: 1100 NORTH GLEBE ROAD
| CITY: ARLINGTON
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           .
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             COMPUTER: IBM PC_COMPATIBLE
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.30 (EPO)
CURRENT APPLICATION DATA:
                                                                                                                                                                                                                     Query Match 0.3%; Score 14; DB 1; Length 18; Best Local Similarity 100.0%; Pred. No. 1.5e+02; Matches 14; Conservative 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Query Match 0.3%; Score 14; DB 1; Length 18; Best Local Similarity 100.0%; Pred. No. 1.5e+02; Matches 14; Conservative 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           GENERAL INFORMATION:
APPLICATION:
TITLE OF INVENTION: Human DNA Mismatch Repair Proteins
FILE REFERENCE: PF106P1
CURRENT APPLICATION NUMBER: US/08/210,143C
CURRENT FILING DATE: 1994-03-16
PRIOR APPLICATION NUMBER: 08/187,757
PRIOR APPLICATION NUMBER: 08/187,757
NUMBER OF SEQ ID NOS: 45
SEQ ID NOS: 45
IENGTH: 18
                                                                                                                                 ; FEATURE:
; OTHER INFORMATION: hMLH1 sense primer
US-08-465-679-11
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ) OTHER INFORMATION: hMLH1 sense primer US-08-210-143C-9
                                                                                                                                                                                                                                                                                                                                                                                                                                                           ; Sequence 9, Application US/08210143C; Patent No. 6620619
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                STATE: VIRGINIA
COUNTRY: U.S.A.
ZIP: 22201-4714
COMPUTER READABLE FORM:
MEDIUM IYPE: Floppy disk
NUMBER OF SEQ ID NOS: 78
SOFTWARE: Patentin version 3.0
SEQ ID NO 11
LENGTH: 18
                                                                                        TYPE: DNA
ORGANISM: Artificial Sequence
                                                                                                                                                                                                                                                                                                            4070 GGGACATGAGGTTC 4083
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TYPE: DNA ORGANISM: Artificial Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                4070 GGGACATGAGGTTC 4083
                                                                                                                                                                                                                                                                                                                                     1 GGGACATGAGGTTC 14
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1 GGGACATGAGGTTC 14
                                                                                                                                                                                                                                                                                                                                                                                                                                           US-08-210-143C-9
                                                                                                                                                                                                                                                                                                            8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ò
```

```
Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CITY: ARLINGTON
STATE: VIRGINIA
COUNTY: U.S.A.
ZIP: 22201-4714
COMPUTER READABLE FORM:
MEDIUM TYPE: Ploppy disk
COMPUTER: IBM PC COMPALIBLE
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.30 (EPO)
CURRENT APPLICATION DATA:
RILING DATE: 08-Oct-1998
CLASSIFICATION DATA:
APPLICATION NUMBER: PCT/EP97/02002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               MAERTENS, GEERT
TITLE OF INVENTION: METHOD FOR TYPING AND DETECTING HBV
NUMBER OF SEQUENCES: 313
CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    0.3%; Score 14; DB 1; Length 18; 100.0%; Pred. No. 1.5e+02; tive 0; Mismatches 0; Indels
                                                                                 APPLICATION NUMBER: PCT/EB97/02002
FILING DATE: 13-APR-1997
APPLICATION NUMBER: EP 96870053.4
FILING DATE: 19-APR-1996
ATTORNEY/AGBVI INFORMATION:
REGISTRATION NUMBER: 36,663
REFERENCE/DOCKET NUMBER: 2551-5
TELECOMMINICATION INFORMATION:
TELEPHONE: (703) 816-4000
APPLICATION NUMBER: US/09/155,885A
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   FILING DATE: 21-APR-1997
APPLICATION NUMBER: EP 96870053.4
FILING DATE: 19-APR-1996
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ADDRESSEE: NIXON & VANDERHYE P.C. STREET: 1100 NORTH GLEBE ROAD
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      HYPOTHETICAL: NO
ANTI-SENSE: NO
SEQUENCE DESCRIPTION: SEQ ID NO: 145:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              NAME: SADOFF, B.J.
REGISTRATION NUMBER: 36,663
REFERENCE/DOCKET NUMBER: 2551-5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  RESULT 240
US-09-155-885A-238/C
US-09-155-885A-238/C
; Sequence 238, Application US/09155885A
; Patent No. 6709812
; GENERAL INFORMATION:
; APPLICANT: STUYVER, LIEVEN
; ROSSAU, RUDI
                     FILING DATE: 08-Oct-1998
CLASSIFICATION: <Unknown>
PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TELECOMMUNICATION INFORMATION
                                                                                                                                                                                                                                                                                                                TELEFAX: (703) 816-4100 INFORMATION FOR SEQ ID NO: 145: $EQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                             TYPE: nucleic acid
STRANDEDNESS: single
TOPOLOGY: linear
MOLECULE TYPE: DNA (genomic)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                     LENGTH: 18 base pairs
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1977 AGCCCAAGATGATG 1990
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Query Match 0.3%
Best Local Similarity 100.C
Matches 14; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               16 AGCCCAAGATGATG 3
```

```
.
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            o;
                                                                                                                                                                                                                                                   Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Gaps
                                                                                                                                                                                                                                                                                                                                               RESULT 241

US-09-700-492-8
; Sequence 8, Application US/09700492
; Patent No. 680476
; GENERAL INFORMATION:
; APPLICANT: CLIVER, STEPHEN GEORGE
; APPLICANT: STATE, LUBOMIRA IOSSIF
; APPLICANT: STANG, NIANSHU
; TITLE OF INVENTION: YEAST
; FILE REFRENCE: 39-225
; CURRENT FILING DATE: 2001-06-13
; PRIOR APPLICATION NUMBER: US/09/700,492
; CURRENT FILING DATE: 1998-05-16
; RATOR FILING DATE: 1998-05-16
; SOFTWARE: PatentIn Ver. 2.0
; SOFTWARE: PatentIn Ver. 2.0
; SOFTWARE: DAA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence
; FEATURE:
                                                                                                                                                                                                                                                 .,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ;
0
                                                                                                                                                                                                         Query Match 0.3%; Score 14; DB 1; Length 18; Best Local Similarity 100.0%; Pred. No. 1.5e+02; Matches 14; Conservative 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Query Match 0.3%; Score 14; DB 1; Length 18; Best Local Similarity 100.0%; Pred. No. 1.5e+02; Matches 14; Conservative 0; Mismatches 0; Indels
2379 TGCTGCCTATGTTG 2392
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  3 TGCTGCCTATGTTG 16
                                                                                                                                                                                                                                                                                                     g
                                                                                                                                                                                                                                                                          ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ò
```

17:

Search completed: August 18, 2005, 08:40:13 Job time : 16 secs